# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Algaecide 40%**

**WHMIS:** Not regulated under WHMIS. It is regulated under the Pest Control Product Act (PCP).

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

---

**Chemical Name:** Not applicable

**Chemical Family:** Pesticide

**Chemical Formula:** Not available

**Trade Name & Synonyms:** WSCP Solution

**Molecular Weight:** Not available

**Material Use**: Algaecide for swimming pools

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** Acute toxicity, Oral, Category 5

Hazardous to the aquatic environment, Acute hazard, Category 1

**Symbol(s)**

**Signal Word** Warning

**Hazard statements** H303 May be harmful if swallowed.

H400 Very toxic to aquatic life.

**Precautionary statements** P273 Avoid release to the environment.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local regulations.

# SAFETY DATA SHEET

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Poly(oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride) | 31512-74-0 | 40 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. If person experiences nausea, headaches, dizziness or has difficulty breathing, contact a physician immediately.

**Skin Contact:** Wash hands thoroughly with soap and water. Should irritation occur, contact a physician.

**Eye Contact:** Flush eyes with plenty of water for 15 minutes. Seek medical attention if irritation persists.

**Ingestion:** Drink 2 or 3 glasses of water to dilute material. Do not induce vomiting. Contact a physician.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Smoke and oxides of nitrogen and carbon.

**Unusual Fire or Explosion Hazards:** None known

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Water fog, carbon dioxide, foam, dry chemical, water should be used to cool surrounding containers.

**Instructions to the Fire Fighters:** Wear proper Protective Equipment. See below.

**Fire Fighting Protective Equipment:** Wear full protective clothing and a positive pressure self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Block any potential routes to sewers, streams, lakes or rivers. Absorb with absorbent materials and dispose into metal containers. Flush residue with water. Block any potential routes to sewers, streams, lakes or rivers.

# SAFETY DATA SHEET

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Do not mix directly with other chemicals. Wear gloves and safety glasses when handling.

**Ventilation Requirements:** Use in well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Keep containers closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Use in a well ventilated area.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** None

**Other (Specify):** Eye wash and shower stations are close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **X** **Solid**

**Odour & Appearance:** Clear blue liquid, slight sweet odour.

**Odour Threshold (ppm):** Not applicable

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Not applicable

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

**Decomposition Temp (°C)** Not available

**Specific Gravity:** 1.094

**Viscosity:** Not available

**Vapour Pressure (mm):** Not available

**Vapour Density (Air-1):** Not available

| | |
|---|---|
| **Flashpoint (°C)** | None |
| **Evaporation Rate** | Not available |
| **Boiling Point (°C) :** | >100°C (212°F) |
| **Freezing Point (°C):** | 0°C |
| **Solubility In Water (20°C):** | Soluble |
| **% Volatile (By Weight)** | 60% |
| **PH:** | 6.0 – 8.0 |
| **Coefficient Of Water/Oil Distribution:** | Not applicable |

## SECTION 10 STABILITY AND REACTIVITY

| | | | |
|---|---|---|---|
| **Chemical Stability:** | **Yes** | **X** | **No** |
| **If No, Under Which Conditions?:** | | | |
| **Incompatibility To Other Substances:** | **Yes** | **X** | **No** |
| **If So, Which Ones:** | Anionic polymers | | |
| **Conditions to Avoid:** | See above | | |
| **Hazardous Decomposition Products:** | Carbon monoxide may be formed upon burning. | | |

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

| | |
|---|---|
| **Inhalation:** | May cause irritation to the respiratory tract. |
| **Skin Contact:** | None expected on short term exposure. |
| **Eye Contact:** | Mild irritant |
| **Ingestion:** | Harmful if swallowed. No data available on human ingestion. |
| **CHRONIC HEALTH EFFECTS:** | Prolonged or repeated skin contact may cause irritation. |
| **Other Health Effects:** | None known |

**LD 50 of Material (Specify Species and Routes):** ATEmix: 2774mg/kg, Oral (Rat), >2000mg/kg, Dermal (Rabbit)

**LC 50 of Material (Specify Species and Route):** Not available

| | |
|---|---|
| **Exposure (Limits):** | Not established |
| **Irritancy of Material** | Mild eye irritant. |
| **Sensitization of Material** | None known |
| **Synergistic Materials** | None known |

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity**

Poly(oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride) 60%

**LC50:** 0.353mg/l 48h (fathead minnow)

0.044mg/l 48h (rainbow trout)

0.660mg/l 24h (harlequinfish, red rasbora)

**Environmental Fate**

**Biodegradability:** Not available

**Bioaccumulative Potential:** Toxic to aquatic life. Unknown effect.

**Mobility In Soil:** Unknown effect.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose absorbed material in accordance to federal, provincial and local regulations.

**Safe Handling of Residues:** Flush residue with copious amounts of water.

**Disposal of Packaging:** Dispose absorbed material in accordance to federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**IMDG**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**IATA**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**DSL and NDSL:** Not Listed.

**WHMIS**: Not regulated under WHMIS. It is regulated under the Pest Control Products Act (PCP).

**USA**

**SARA (302 Extremely hazardous substances list):** No components of this product are listed.

**SARA (312 Hazard category):** Immediate (acute) health hazard.

**SARA (313 Toxic chemicals list):** No components of this product are listed.

**TSCA:** Not listed.

**FIFRA:** This product is a registered pesticide.

**INTERNATIONAL**

Mexico, China, Korea and Taiwan: Listed

Australia, Japan and Philippines: Not listed.

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **May 17, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

**While Capo Industries Ltd. believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Capo Industries Ltd. assumes legal responsibility. They are offered solely for your consideration and verification. Any use of this data and information must be determined by the user to be in accordance with applicable Federal, Provincial and local laws and regulations.**

# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Algaecide 60%**

**WHMIS:** Not regulated under WHMIS. It is regulated under the Pest Control Product Act (PCP).

---

**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

---

**Chemical Name:** Not applicable

**Chemical Family:** Pesticide

**Chemical Formula:** Not available

**Trade Name & Synonyms:** WSCP Solution

**Molecular Weight:** Not available

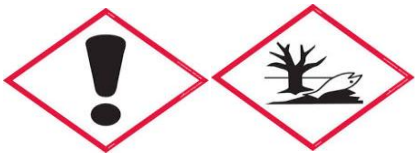
**Material Use**: Algaecide for swimming pools

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** Acute toxicity, Oral, Category 4

Hazardous to the aquatic environment, Acute hazard, Category 1

**Symbol(s)**



**Signal Word** Warning

**Hazard statements** H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

**Precautionary statements** P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local regulations.

**NFPA: 1 Health, 0 Fire, 0 Reactivity**

**HMIS: 1 Health, 0 Fire, 0 Reactivity**

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Poly(oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride) | 31512-74-0 | 60 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. If person experiences nausea, headaches, dizziness or has difficulty breathing, contact a physician immediately.

**Skin Contact:** Wash hands thoroughly with soap and water. Should irritation occur, contact a physician.

**Eye Contact:** Flush eyes with plenty of water for 15 minutes. Seek medical attention if irritation persists.

**Ingestion:** Drink 2 or 3 glasses of water to dilute material. Do not induce vomiting. Contact a physician.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Smoke and oxides of nitrogen and carbon.

**Unusual Fire or Explosion Hazards:** None known

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Water fog, carbon dioxide, foam, dry chemical, water should be used to cool surrounding containers.

**Instructions to the Fire Fighters:** Wear proper Protective Equipment. See below.

**Fire Fighting Protective Equipment:** Wear full protective clothing and a positive pressure self-contained breathing apparatus.

# SAFETY DATA SHEET

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Block any potential routes to sewers, streams, lakes or rivers. Absorb with absorbent materials and dispose into metal containers. Flush residue with water. Block any potential routes to sewers, streams, lakes or rivers.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Do not mix directly with other chemicals. Wear gloves and safety glasses when handling.

**Ventilation Requirements:** Use in well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Keep containers closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Use in a well ventilated area.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** None

**Other (Specify):** Eye wash and shower stations are close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **X** **Solid**

**Odour & Appearance:** Clear blue liquid, slight sweet odour.

**Odour Threshold (ppm):** Not applicable

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Not applicable

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

| | |
|---|---|
| **Decomposition Temp (°C)** | Not available |
| **Specific Gravity:** | 1.15 |
| **Viscosity:** | 125 CST (Kinematic) |
| **Vapour Pressure (mm):** | Not available |
| **Vapour Density (Air-1):** | Not available |
| **Flashpoint (°C)** | Closed cup: >100°C (212°F). (Tagliabue) |
| **Evaporation Rate** | Not available |
| **Boiling Point (°C) :** | >100°C (212°F) |
| **Freezing Point (°C):** | 0°C |
| **Solubility In Water (20°C):** | Soluble |
| **% Volatile (By Weight)** | 40% |
| **PH:** | 6.0 – 8.0 |
| **Coefficient Of Water/Oil Distribution:** | Not applicable |

## SECTION 10 STABILITY AND REACTIVITY

| | | | |
|---|---|---|---|
| **Chemical Stability:** | **Yes** | **X** | **No** |
| **If No, Under Which Conditions?:** | | | |
| **Incompatibility To Other Substances:** | **Yes** | **X** | **No** |
| **If So, Which Ones:** | Anionic polymers | | |
| **Conditions to Avoid:** | See above | | |
| **Hazardous Decomposition Products:** | Carbon monoxide may be formed upon burning. | | |

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

| | |
|---|---|
| **Inhalation:** | May cause irritation to the respiratory tract. |
| **Skin Contact:** | None expected on short term exposure. |
| **Eye Contact:** | Mild irritant |
| **Ingestion:** | Harmful if swallowed. No data available on human ingestion. |
| **CHRONIC HEALTH EFFECTS:** | Prolonged or repeated skin contact may cause irritation. |
| **Other Health Effects:** | None known |

**LD 50 of Material (Specify Species and Routes):** 1850 mg/l, Oral (Rat), >2000 mg/kg, Dermal (Rabbit)

**LC 50 of Material (Specify Species and Route):** Not available

| | |
|---|---|
| **Exposure (Limits):** | Not established |
| **Irritancy of Material** | Mild eye irritant. |

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity**

**LC50:** 0.353mg/l 48h (fathead minnow)

0.044mg/l 48h (rainbow trout)

0.660mg/l 24h (harlequinfish, red rasbora)

**Environmental Fate**

**Biodegradability:** Not available

**Bioaccumulative Potential:** Toxic to aquatic life. Unknown effect.

**Mobility In Soil:** Unknown effect.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose absorbed material in accordance to federal, provincial and local regulations.

**Safe Handling of Residues:** Flush residue with copious amounts of water.

**Disposal of Packaging:** Dispose absorbed material in accordance to federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**IMDG**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**IATA**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**DSL and NDSL:** Not Listed.

**WHMIS**: Not regulated under WHMIS. It is regulated under the Pest Control Products Act (PCP).

**USA**

**SARA (302 Extremely hazardous substances list):** No components of this product are listed.

**SARA (312 Hazard category):** Immediate (acute) health hazard.

**SARA (313 Toxic chemicals list):** No components of this product are listed.

**TSCA:** Not listed.

**FIFRA:** This product is a registered pesticide.

**INTERNATIONAL**

Mexico, China, Korea and Taiwan: Listed

Australia, Japan and Philippines: Not listed.

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **May 17, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**ALKAJUSTER / ALKA UP** **WHMIS:** Not Regulated

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Sodium Bi Carbonate

**Chemical Family:** Bi Carbonates

**Chemical Formula:** NAHC03

**Trade Name & Synonyms:** Baking Soda

**Molecular Weight:** 84.0

**Material Use**: Pool Water Alkalinity Booster

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** None

**Symbol(s):** None

**Signal Word:** None

**Hazard statements:** None

**Precautionary statements:** None

**NFPA: 0 Health, 0 Fire, 0 Reactivity**

**HMIS: 0 Health, 0 Fire, 0 Reactivity**

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|

No regulated components

## SECTION 4 FIRST AID MEASURES

**Inhalation:** If respiratory problems arise, move the victim to fresh air. Give artificial respiration ONLY If breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing AND no pulse. Obtain medical advice IMMEDIATELY.

**Skin Contact:** Start flushing while removing contaminated clothing. Wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice.

**Eye Contact:** Immediately flush eyes thoroughly for 15 minutes with running water. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention. Do not allow victim to rub eyes. Do not attempt to manually remove anything stuck to the eye(s).

**Ingestion:** Do not attempt to give anything by mouth to an unconscious person. If victim is alert and not convulsing, rinse mouth out and give ½ to 1 glass of water to dilute material. DO NOT induce vomiting. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. Obtain medical attention IMMEDIATELY.

**Note to physicians:** Treat symptomatically. Sodium salts have a hypothetical risk of hypernatremia. In addition to calcium levels, sodium and phosphate levels should be monitored. Medical conditions that may be aggravated by exposure to this product include diseases of the skin, eyes or respiratory tract.

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Thermal decomposition products are toxic and may include soda ash (sodium carbonate) oxides of sodium, carbon and irritating gases. Sodium bicarbonate begins to decompose at 50°C, releasing carbon dioxide, sodium carbonate and water. Total decomposition occurs at 270°C.

**Unusual Fire or Explosion Hazards:** Avoid accumulation and dispersion of dust. Spilled material may cause floors and contact surfaces to become slippery. Do not flush with water as aqueous solutions or powders that become wet render surfaces extremely slippery. Enforce NO SMOKING rules.

**Sensitivity to Mechanical Impact**: None.

**Rate of Burning:** Not available.

**Explosive Power:** Not available.

**Sensitivity to Static Discharge:** None.

**Fire Extinguishing Media:** Is used as an extinguishing agent for all classes of fires. Use

Media appropriate for surrounding fire and/or materials.

**Instructions to the Fire Fighters:** Isolate materials that are not involved in the fire and protect personnel. Do not flush with water as aqueous solutions or powders that become wet render surfaces extremely slippery. Spilled material may cause floors and contact surfaces to become slippery.

**Fire Fighting Protective Equipment:** Use self-contained breathing apparatus and protective clothing.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** In all cases of leak or spill contact vendor at Emergency Number shown on the front page of this MSDS. Minimize airborne spreading of dust. Wear respirator, protective clothing and gloves. Avoid dry sweeping. Do not use compressed air to clean surfaces. Vacuuming or wet sweeping is preferred. Return all material possible to container for proper disposal. Do not allow to enter sewers or watercourses.

Any recovered product can be used for the usual purpose, depending on the Extent and kind of contamination. Where a package (drum or bag) is damaged and/or leaking, repair it, or place it into an over-pack drum immediately so as to avoid or minimize material loss and contamination of surrounding environment. Replace damaged containers immediately to avoid loss of material and contamination of surrounding atmosphere. Ventilate enclosed spaces. Notify applicable government authority if release is reportable or could adversely affect the environment.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Use normal “good” industrial hygiene and housekeeping practices. Avoid Accumulation and dispersion of dust. Clean up immediately to eliminate hazard.

**Ventilation Requirements:** See Section 8, **“**Engineering Controls”.

**Other Precautions:** Use only with adequate ventilation and avoid breathing dusts. Avoid contact with Eyes, skin or clothing. Wash thoroughly with soap and water after handling. Wash Contaminated clothing thoroughly before reuse.

**STORAGE**

**Ventilation Requirements:** General exhaust is acceptable.

**Storage Requirements:** Store in a cool, dry and well-ventilated area. Keep away from heat, sparks and flames. Keep containers closed. Avoid moisture contamination. Prolonged storage

may result in lumping or caking. Protect from direct sunlight. Protect against physical damage.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** General exhaust is acceptable. Local exhaust ventilation preferred.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Gloves and protective clothing made from cotton, leather, rubber or plastic should be impervious under conditions of use. Prior to use, user should confirm impermeability. Discard contaminated gloves.

**Eye (Specify):** Safety glasses with side shields are recommended to prevent eye contact. Use Chemical safety goggles when there is potential for eye contact. Contact lenses Should not be worn when working with this material.

**Respiratory (Specify):** Use dust mask for concentrations of nuisance dust up to 100mg/m3 particulate. An Air-supplied respirator if concentrations are higher or unknown.

**Other (Specify):** None.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

| | | | | |
|---|---|---|---|---|
| **Physical State:** | **Gas** | **Liquid** | **Solid** | **X** |
| **Odour & Appearance:** | Odourless, opaque, white powder | | | |
| **Odour Threshold (Ppm):** | Not applicable | | | |
| **Auto Ignition Temperature (Celsius):** | Not applicable | | | |
| **Upper Explosion Limit (% By Volume):** | Not applicable | | | |
| **Lower Explosion Limit (% By Volume):** | Not applicable | | | |
| **Decomposition Temp (°C**): | 270°C | | | |
| **Flammability:** | | **Yes** | **No** | **X** |
| **If Yes, Under Which Conditions?:** | | Not applicable | | |
| **Viscosity (cps):** | Not applicable | | | |
| **Specific Gravity:** | 2.16 | | | |
| **Vapour Pressure (Mm):** | Not applicable | | | |
| **Vapour Density (Air-1):** | Not applicable | | | |
| **Flashpoint (C)** | Not flammable | | | |
| **Evaporation Rate** | Not applicable | | | |
| **Boiling Point (C):** | loses C02 at 270 deg C | | | |
| **Freezing Point (C):** | Not applicable | | | |
| **Solubility In Water (20c):** | 9.6 g/100g water | | | |

| | |
|---|---|
| **% Volatile (By Weight)** | Not applicable |
| **Ph:** | 8.50 (1% solution) |
| **Coefficient Of Water/Oil Distribution:** | Not applicable |

## SECTION 10 STABILITY AND REACTIVITY

| | |
|---|---|
| **Chemical Stability:** | **Yes** **X** **No** |
| **If No, Under Which Conditions?:** | Not applicable |
| **Incompatibility To Other Substances:** | **Yes** **X** **No** |
| **If So, Which Ones:** | Strong oxidizers, acids |
| **Conditions to Avoid:** | High temperatures, sparks, open flames and all other sources of ignition. Minimize air borne spreading of dust. Avoid direct sunlight and moisture contamination. Hygroscopic. |
| **Hazardous Decomposition Products:** | Thermal decomposition products are toxic and may include soda ash Oxides of sodium, carbon and irritating gases. Sodium bicarbonate begins to decompose at 50°C, releasing carbon Dioxide, sodium carbonate and water. Total decomposition occurs at 270°C. |

## SECTION 11 TOXICOLOGICAL INFORMATION

**POTENTIAL HEALTH EFFECTS**

| | |
|---|---|
| **Inhalation:** | Product may be mildly irritating to the nose, throat and respiratory and may cause coughing and sneezing. Excessive contact with powder may cause drying of mucous membranes of nose and throat due to absorption of moisture and oils. See “Other Health Effects” Section. |
| **Skin Contact:** | This product may cause irritation due to abrasive action. Excessive contact with powder may cause drying of the skin due to absorption of moisture and oils. |
| **Skin Absorption:** | Not likely to be absorbed through the skin. |
| **Eye Contact:** | This product may cause irritation, redness and possible damage due to abrasiveness. Excessive contact with powder may cause drying of mucous membranes of the eyes due to absorption of moisture and oils. |
| **Ingestion:** | Ingestion is not likely route of exposure. This product may cause mild gastrointestinal discomfort. |
| **Other Health Effects:** | May cause central nervous system (CNS) depression, metabolic alkalosis, hypernatremia and pneumoconiosis. CNS depression is characterized by headache, dizziness, drowsiness, nausea, vomiting and incoordination. Severe overexposures may lead to coma and possible death due to respiratory failure. |

**LD 50 of Material (Specify Species and Routes)** 4220mg/kg Oral, Rat

**LC 50 of Material (Specify Species and Routes)** N/A

**Exposure (Limits):** ACGIH – TLV 10mg/m3 –nuissance dust; OSHA – TWA 15mg/m3 total dust – 5mg/m3 respire fraction.

**Irritancy of Material** Mild skin and eye irritant.

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity:** May be harmful to aquatic life.

Sodium Bicarbonate

96-hour LC50 (Lepomis macrochirus) = 7100 mg/ll

48-hour LC50 (Culex sp. Larvae or mosquito) = 2000 mg/l

**Environmental Fate:** Product has an unaesthetic appearance and can be a nuisance. Can be dangerous if allowed to enter drinking water intakes. Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds or rivers.

**Degradability:** Not applicable

**Bioaccumulative Potential:** Not applicable

**Mobility In Soil:** Not applicable

## SECTION 13 DISPOSAL CONSIDERATIONS

**Deactivating Chemicals:** None required.

**Waste Disposal:** Dispose of waste material at a municipal landfill site should be satisfactory.

**Safe Handling of Residues:** Empty containers that contain product residue. No special treatment required.

**Disposal of Packaging:** Recycling is encouraged. Treat package in the same manner as the product. Empty package may be disposed of with normal garbage.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

This product is not regulated by TDG.

Label(s): Not applicable Placard: Not applicable.

ERAP Index: --------- Exemptions: None known.

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

This product is not regulated by DOT

Label(s): Not applicable. Placard: Not applicable.

CERCLA-RQ: Not available. Exemptions: Not available.

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**CEPA – NSNR:** This material is included on the DSL under the CEPA

**CEPA – NPRI:** Not included.

**CANADIAN FOOD AND DRUG ACT/REGULATIONS:** The use of this material/product as a food additive is regulated by Health Canada in the Food and Drug Act and the Food and Drug Regulations. It is incumbent on the user of this material/product to Ensure any intended food application is consistent with Health Canada guidelines. Food Grade designation in no way implies That the product is safe for consumption by humans.

**WHMIS**: Not Regulated.

**USA**

**Environmental Protection Act:** This material is included on the TSCA Inventory.

**U.S. FOOD AND DRUG ADMINISTRATION:** This material/product is regulated for use by the US FDA. It is incumbent on the user of this material/product to ensure any intended food application is consistent with US FDA guidelines. Food Grade designation in no way implies that the product is safe for consumption by humans.

**INTERNATIONAL**

Sodium Bicarbonate is found on the following inventories: EINECS (European Inventory of Existing Commercial Chemical Substances).

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **January 1, 1996**
**Date Revised:** **December 1, 2018**

**Additional Notes Or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Bromaid** **WHMIS:** Not regulated under WHMIS. It is a registered pest control product under (PCP).

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

---

**Chemical Name:** Sodium Bromide Solution
**Chemical Family:** Inorganic Salt
**Chemical Formula:** NaBr
**Trade Name & Synonyms:** Not applicable
**Molecular Weight:** Not applicable
**Material Use**: Spa disinfectant

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** None
**Symbol(s):** None
**Signal Word** None
**Hazard statements** None
**Precautionary statements** None

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|

No regulated components

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. If breathing is difficult give artificial respiration and seek medical attention.
**Skin Contact:** Wash hands thoroughly with soap and water.
**Eye Contact:** Flush eyes with copious amounts of water for 15 minutes. Seek medical attention.

**Ingestion:** Drink 2 or 3 glasses of water. Do not induce vomiting, and contact a physician.

**Note to physicians** No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Above 500°C toxic bromine fumes are released.

**Unusual Fire or Explosion Hazards:** Not applicable

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media appropriate for surrounding fire.

**Instructions to the Fire Fighters:** Cool containers exposed to fire with water spray.

**Fire Fighting Protective Equipment:** Wear full protective clothing and a NIOSH approved self-contained breathing apparatus in positive pressure mode.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Avoid dispersal of spilled material into contact with waterways, drains, sewers and soil. Move containers from spill area. Absorb spill with synthetic or natural absorbent and sweep into a clean, dry and labelled container for disposal.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid prolonged skin contact. Wash hands thoroughly after use. Wear gloves and safety glasses when handling.

**Ventilation Requirements:** Use in a well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Keep away from direct sunlight. Keep away from incompatible materials, food and drink. Keep containers closed when not in use. Store containers upright to prevent leakage.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation to keep airborne concentrations below the exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Butyl or natural rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** None under normal conditions. If exposure to airborne concentrations is above exposure limits wear a self-contained breathing apparatus.

**Other (Specify):** Eye wash and shower stations are close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **X** **Solid**

**Odour & Appearance:** Clear blue liquid, odourless

**Odour Threshold (ppm):** Not applicable

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Use media appropriate for surrounding fire.

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

**Decomposition Temp (°C)** Above 500°C

**Specific Gravity:** 1.360

**Viscosity:** Not available

**Vapour Pressure (mm):** Not applicable

**Vapour Density (Air-1):** Not applicable

**Flashpoint (°C)** Not applicable

**Evaporation Rate** Not applicable

**Boiling Point (°C):** 100°C

**Freezing Point (°C):** 0°C

**Solubility In Water (20°C):** Soluble

**% Volatile (By Weight)** 65%

**PH:** 6 - 8

**Coefficient Of Water/Oil Distribution:** Not applicable

# SAFETY DATA SHEET

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** **Yes** **X** **No**

**If No, Under Which Conditions?:**

**Incompatibility To Other Substances:** **Yes** **X** **No**

**If So, Which Ones:** Acids, strong oxidants and heavy metal salts.

**Conditions to Avoid:** Will react violently with bromine trifluoride.

**Hazardous Decomposition Products:** Bromine fumes

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** None under normal conditions. Mists may be irritating to the respiratory tract.

**Skin Contact:** Slightly irritating to the skin

**Eye Contact:** Slightly irritating to the eyes.

**Ingestion:** Stomach upset and nausea.

**CHRONIC HEALTH EFFECTS:** None

**Other Health Effects:** Prolonged skin contact may cause mild irritation.

**LD 50 of Material (Specify Species and Routes):** ATEmix: 12004.8mg/kg, Oral (Rat), >2000 mg/kg, Oral (Rabbit)

**LC 50 of Material (Specify Species and Routes):** Not available

**Exposure (Limits):** Not available

**Irritancy of Material** Mild skin, eye and respiratory tract irritant.

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity** Sodium Bromide is an inorganic salt, which fully dissociates in aquatic environment to bromide and sodium ions. It also undergoes degradation in soil to bromide ion (no Further degradation or biodegradation will occur).

**Sodium Bromide**

**96 h, LC50 Fish:** >1000 mg/l (rainbow trout)

>1000 mg/l (bluegill sunfish)

**48 h, EC50, Daphnia magna:** >1000 mg/l

**Oral LD50, Bobwhite quail:** >2250 mg/kg

**Dietary LC50, Mallard duck:** >5633 ppm

**Dietary LC50, Bobwhite quail:** >5633 ppm

**Environmental Fate**

**Biodegradability:** Not relevant for inorganic salts.

**Bioaccumulative Potential:** Not expected to bioaccumulate. BCF=0.23-1.41

**Mobility In Soil:** Not relevant for inorganic salts.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose absorbed material in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Flush residue with copious amounts of water.

**Disposal of Packaging:** Dispose containers in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA** Listed in DSL.

**PCP:** This product is a registered pesticide.

**USA** Reported in the EPA TSCA Inventory. This product is registered under FIFRA.

**INTERNATIONAL** Reported in EINECS(Europe), listed in AICS(Australia), NZIoC(New Zealand), IECSC(China), ECL KE-31368 (Korea), PICCS(Philippines), and ENCS no. 1-113, ISHL no. 1-113(Japan)

# SAFETY DATA SHEET

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **November 16, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# Safety Data Sheet

## Product Identifier

**Manufacturer's Name:** **CAPO INDUSTRIES LTD.**
**Street Address:** **1200 Corporate Drive**
**City:** **Burlington, Ontario, CANADA**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)(Transport)**

## SECTION 1. IDENTIFICATION

| | |
|---|---|
| **Product Identifier** | Cal Rise |
| **Other Means of Identification** | Calcium Chloride |
| **Recommended Use** | Hardness Booster |
| **Restrictions on Use** | Not available |
| **Initial Supplier Identifier** | Capo Industries Ltd. |
| **Emergency Telephone Number** | (905) 332-6626 (Non-Transport) |

## SECTION 2. HAZARD IDENTIFICATION

**GHS Classification** Acute toxicity, Oral, Category 4
Eye irritation, Category 2A

**Label Elements**

**Signal Word:** Warning

**Hazard Statements:**
H302 Harmful if swallowed.
H319 Causes serious eye irritation.

**Precautionary Statements:**
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P317 IF SWALLOWED: Get medical help.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several

minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P330 Rinse mouth.
P337+P317 If eye irritation persists: Get medical help.
P501 Dispose of contents/container in accordance with all local regulations.

**Other Hazards**

- Calcium Chloride is hygroscopic and is capable of absorbing moisture from the air to become liquid. Chlorides in the presence of water and oxygen are associated with the accelerated corrosion of common metals, such as steel, copper, and brass.
- Calcium Chloride has an exothermic heat of solution and solid products release a large amount of heat when dissolved in water.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Concentration | Common name / Synonyms |
|---|---|---|---|
| Calcium Chloride | 10043-52-4 | 83 – 87 | Not available |
| Water | 7732-18-5 | 8 – 14 | Not available |
| Potassium Chloride | 7447-40-7 | 2 – 3 | Not available |
| Sodium Chloride | 7647-14-5 | 1 – 2 | Not available |

**Notes**
Potassium chloride and sodium chloride are impurities from the naturally occurring source material, brine solution.

## SECTION 4. FIRST-AID MEASURES

**Inhalation**
Remove person to fresh air and keep comfortable for breathing. If breathing is difficult get medical help.

**Skin Contact**
Flush skin with running water for 20 minutes. If irritation persists, repeat flushing. Get medical help. Take off contaminated clothing and wash it before reuse.

**Eye Contact**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical help.

**Ingestion** Rinse mouth. Do not induce vomiting. Get medical help if you feel unwell.

**Most Important Symptoms and Effects, Acute and Delayed**
Causes serious eye irritation with redness and burning. Direct contact with abraded skin may cause erythema and burns. Inhalation of dust may cause upper respiratory tract irritation.

**Immediate Medical Attention and Special Treatment**
Due to irritant properties, resulting from heat created as solid material dissolves in water, swallowing may result in burns/ulceration of mucous membranes. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media** Use water, dry chemical, $CO_2$, or foam to extinguish.

**Unsuitable Extinguishing Media** Not available

**Specific Hazards Arising from the Product**
Avoid direct contact of this product with water as this can cause an exothermic reaction.

**Special Protective Equipment and Precautions for Fire-Fighters**
Keep unnecessary people away, isolate hazard area and deny entry. This material does not burn. Fight fire for other material that is burning. Water should be applied in large quantities as fine spray. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Wear protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, and Emergency Procedures**
Isolate area. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause a slipping hazard on some surfaces. Use appropriate safety equipment. Contain spill if safe to do so. Prevent spill from entering sewers or water courses.

**Methods for Containment and Cleaning Up**
Collect spilled material in suitable and properly labeled containers. Flush with plenty of water.

## SECTION 7. HANDLING AND STORAGE

**Precautions for Safe Handling**
Avoid contact with eyes, skin, and clothing. Wash skin and contaminated clothing thoroughly after handling. Do not eat, drink, or smoke when using this product. Wear protective gloves, protective clothing, and eye protection when handling. Heat developed during diluting or dissolving is very high. Use cool water when diluting or dissolving (temperature less than 80°F, 27°C).

**Conditions for Safe Storage**
Store in a cool, dry place. Protect from atmospheric moisture. Keep container tightly closed. Keep separated from incompatible substances.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters**

**Exposure Limits** Canada TWA's (Ontario) Calcium Chloride: 5 $mg/m^3$

**Appropriate Engineering Controls**
Local exhaust ventilation. Ensure eye wash and shower stations are close to work area.

**Individual Protection Measures**

| | |
|---|---|
| **Eye/Face Protection** | Safety glasses if eye contact is likely. |
| **Skin Protection** | Latex or rubber gloves if prolonged skin contact is likely. |
| **Respiratory Protection** | Wear appropriate dust mask if prolonged use in non-ventilated area is unavoidable. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance** | Opaque white flakes |
| **Odour** | Odourless |
| **Odour Threshold** | No data available |
| **pH** | 8 – 10 (5% solution) |
| **Melting Point and Freezing Point** | 772$^{o}$C (1422$^{o}$F) |
| **Initial Boiling Point and Boiling Range** | 1935$^{o}$C (3515$^{o}$F) |
| **Flash Point** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Flammability (solid, gas)** | Not applicable |

**Upper and Lower Flammability or Explosive Limit** Not applicable

| | |
|---|---|
| **Vapour Pressure** | Negligible at ambient temperature. |
| **Vapour Density (air = 1)** | Not applicable |
| **Bulk Density** | 850 – 900 kg/m$^3$ |
| **Solubility in Water** | Soluble |
| **Solubility in Other Liquids** | No data available |

**Partition Coefficient, n-Octanol / Water (Log Kow)** No data available

| | |
|---|---|
| **Auto-ignition Temperature** | Not applicable |
| **Decomposition Temperature** | Not applicable |
| **Viscosity** | Not applicable |

## SECTION 10. STABILITY AND REACTIVITY

**Reactivity** Hygroscopic. Liberates large amounts of heat when dissolving in water or aqueous acids.

**Chemical Stability** Stable at normal temperatures and pressures.

**Possibility of Hazardous Reactions** Avoid moisture.

**Conditions to Avoid** Avoid excessive amounts of heat.

**Incompatible Materials**
Avoid contact with: Bromide trifluoride, 2-furan percarboxylic acid because calcium chloride is incompatible with those substances. Contact with zinc forms flammable hydrogen gas, which can be explosive. Catalyzes exothermic polymerization of methyl vinyl ether. Attacks metals in the presence of moisture and may release flammable hydrogen gas. Reaction of bromide impurity with oxidizing materials may generate trace levels of impurities such as bromates.

**Hazardous Decomposition Products**
Thermal decomposition products are toxic and may include Hydrochloric acid and oxides of calcium and chlorine oxide.

## SECTION 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure**

**X** Inhalation **X** Skin contact **X** Eye contact **X** Ingestion

**Acute Toxicity**

**$LC_{50}$ (Inhalation)** ATE mix: No data available

**$LD_{50}$ (Oral)** ATE mix: 1126 mg/kg, Oral

**$LD_{50}$ (Dermal)** ATE mix: 2637 mg/kg, Dermal

**Ingestion**
Low toxicity if swallowed. Small amounts swallowed are not likely to cause injury. Large amounts swallowed may cause local mucosal damage to esophagus and stomach. Swallowing may result in gastrointestinal irritation or ulceration.
**Inhalation** Dust may cause irritation to upper respiratory tract (nose and throat).

**Skin Corrosion / Irritation**
Direct contact with abraded skin may cause erythema and burns. Prolonged contact and occlusion may cause more severe symptoms.

**Serious Eye Damage / Irritation** Severe irritation. May cause corneal damage and conjunctivitis.

**STOT (Specific Target Organ Toxicity) - Single Exposure** No data available

**Aspiration Hazard** No data available

**STOT (Specific Target Organ Toxicity) - Repeated Exposure** No data available

**Respiratory and/or Skin Sensitization** Not sensitizing to skin or respiratory tract.

**Carcinogenicity** This product is not classified as a carcinogen by NTP, IARC or OSHA.

**Reproductive Toxicity**

**Development of Offspring** None known

**Sexual Function and Fertility** None known

**Effects on or via Lactation** None known

**Germ Cell Mutagenicity** None known

**Interactive Effects** None known

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Aquatic Toxicity:**
Material is practically non-toxic to aquatic organisms on an acute basis. (LC50/EC50/EL50/LL50>100mg/L in the most sensitive species tested).

**Fish Toxicity:**
LC50 (96 hr), bluegill (Lepomis macrochirus): >9500 - 13400 mg/l
LC50 (96 hr), fathead minnow (Pimephales promelas): 4630 mg/l

**Invertebrate Toxicity:**
EC50 (48 hr), Daphnia magna: 2800 mg/l
NOEC (21 days), Daphnia magna: 230 mg/l

**Fate and Transport**

**Persistence**
Calcium chloride is believed not to persist in the environment because it is readily dissociated into calcium and chloride ions in water. Calcium chloride released into the environment is thus likely to be distributed into the water in the form of calcium and chloride ions. Calcium ions may remain in soil by binding to soil particulate or by forming stable salts with other ions. Chloride ions are mobile and eventually drain into surface water. Both ions originally exist in nature, and their concentrations in surface water will depend on various factors, such as geological parameters, weathering, and human activities.

**Biodegradation** This material is inorganic and not subject to biodegradation.

**Bioconcentration**
No bioconcentration is expected because of the relatively high water solubility. Potential for mobility in soil is very high (Koc between 0 and 50). Partitioning from water to n-octanol is not applicable.

**Bioaccumulative Potential**
Calcium chloride and its dissociated forms (calcium and chloride ions) are ubiquitous in the environment. Calcium and chloride ions can be found as constituents in organisms. Considering its dissociation properties, calcium chloride is not expected to accumulate in living organisms.

**Mobility in Soil**
Calcium chloride is not expected to be absorbed in soil due to its dissociation properties and high water solubility. It is expected to dissociate into calcium and chloride free ions, or it may form stable salts with other ions, leading to different fates between calcium and chloride ions in soil and water components. Calcium ions may bind to soil particulate or may form stable inorganic salts with sulfate and carbonate ions. The chloride ion is mobile in soil and eventually drains into surface water because it is readily dissolved in water.

**Other Adverse Effects** No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal Methods**

**Waste Disposal:** Dispose material in accordance with Federal, Provincial, and local government regulations. Do not dispose of wastes in local sewer or with normal refuse.

**Safe Handling of Residues:** Flush residue with plenty of water.

**Disposal of Packaging:** Dispose of container in accordance with Federal, Provincial, and local government regulations. Container rinsate must be disposed of in compliance with applicable regulations.

## SECTION 14. TRANSPORT INFORMATION

| Regulation | UN No. | Proper Shipping Name | Technical Name (for N.O.S. entry) | Transport Hazard Class(es) | Packing Group |
|---|---|---|---|---|---|
| **TDG** | Not Regulated | | | | |
| **US DOT** | Not Regulated | | | | |

**Special Precautions** None

**Environmental Hazards** None

## SECTION 15. REGULATORY INFORMATION

**Safety, Health, and Environmental Regulations**

**CANADA**
**DSL/NDSL:** All components of this product are listed on either the DSL or the NDSL.

**USA**
**TSCA (Toxic Substances Control Act):** All components are listed on the TSCA.
**California Proposition 65:** This product is not listed on the California Governor's current list of Carcinogens, Reproductive Toxicants, and/or Candidate Carcinogens (Proposition 65).

## SECTION 16. OTHER INFORMATION

**Prepared By (Group, Department):** Quality Assurance **Telephone:** (905) 332-6626

**Preparation Date:** January 1, 1996
**Date of Latest Revision:** April 18, 2022
**Additional Notes or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Cartridge Cleaner** **WHMIS:** E

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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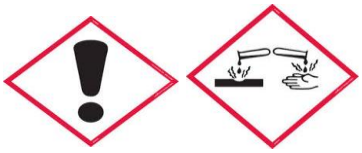
**Chemical Name:** Not applicable
**Chemical Family:** Not applicable
**Chemical Formula:** Proprietary blend
**Trade Name & Synonyms:** Not applicable
**Molecular Weight:** Not applicable
**Material Use**: Spa Cartridge Cleaner

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:**
H302 Acute toxicity, Oral, Category 4
H314 Skin corrosion/irritation, Category 1B
H318 Serious eye damage/eye irritation, Category 1
H335 Specific target organ toxicity, Single exposure, Respiratory tract irritation, Category 3
H401 Hazardous to the aquatic environment, Acute Hazard, Category 2

**Symbol(s)**



**Signal Word** Danger

**Hazard statements** Harmful is swallowed. Causes severe skin burns and eye damage. May cause respiratory irritation. Toxic to aquatic life.

**Precautionary statements** Do not ingest. If ingested, drink 2 to 3 glasses of water to dilute. Do not induce vomiting. Seek immediate medical attention. Avoid skin and eye contact. Wear gloves and safety glasses when handling. Wash hands thoroughly after use. If in eyes, flush with copious amounts of water for 20 minutes and seek medical

attention. Use in a well ventilated area. Avoid breathing in mists/vapours/fumes. If inhaled, remove person to fresh air and seek medical attention. Avoid release into the environment.

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Tetrasodium Ethylene Diamine Tetraacetate | 64-02-8 | 1 - 5 |
| Sodium Hydroxide | 1310-73-20 | 3 – 7 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** If mists are inhaled, remove person to fresh air and seek medical attention.

**Skin Contact:** Wash thoroughly with soap and water.

**Eye Contact:** Flush eyes with copious amounts of water for 20 minutes. Seek medical attention if irritation persists.

**Ingestion:** Drink 2 or 3 glasses of water to dilute and contact a physician immediately. Do not induce vomiting unless advised by a physician or poison control centre.

**Note to physicians** Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower GI tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal/ esophageal control if lavage is done. Chemical eye burns may require extended irrigation. Obtain prompt consultation from an ophthalmologist. If burn is present, treat as any thermal burn, after decontamination. First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** CO, CO2, nitrous oxide and smoke.

**Unusual Fire or Explosion Hazards:** None known

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** Isolate and restrict area access. Product reacts with water. Reaction may

Produce heat and/or gases. This reaction may be violent. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Contact with some metals (particularly magnesium, aluminum and galvanized zinc) can rapidly generate hydrogen.

**Fire Fighting Protective Equipment:** Wear full protective clothing and a full face piece self-contained breathing apparatus in positive pressure mode.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Prevent entry into soil, ditches, sewers, waterways and/or groundwater. Isolate hazard area and restrict access. Dike area to contain spill. Dilute spill with large amounts of water and neutralize with dilute acid. Vacuum or sweep up neutralized material for proper disposal.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid contact with skin, eyes and clothing. Do not ingest. Avoid inhalation of mists. Wear gloves and safety glasses and face shield when handling. Handle and open containers with care. Empty containers may contain hazardous product residues. Keep containers closed when not in use. Protect against physical damage.

**Ventilation Requirements:** Use in a well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry well ventilated area.

**Storage Requirements:** Keep away from heat and ignition sources. Place away from incompatible materials.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation to keep exposures within applicable limits.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin Specify):** PVC, neoprene or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles, and face shield if eye contact is likely.

**Respiratory (Specify):** None in normal conditions. In non-ventilated areas wear a positive pressure supplied air respirator. In misty atmospheres, use an organic vapour respirator in combination

with a dust/mist filter.

**Other (Specify):** Eye wash and shower stations are close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **X** **Solid**

**Odour & Appearance:** Yellow-green liquid with characteristic odour.

**Odour Threshold (ppm):** Not available

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Not applicable

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

**Decomposition Temp (°C)** Not available

**Specific Gravity:** 1.110

**Viscosity:** Not available

**Vapour Pressure (mm):** Not available

**Vapour Density (Air-1):** Not available

**Flashpoint (°C)** Not applicable

**Evaporation Rate** Not available

**Boiling Point (°C):** 100°C

**Freezing Point (°C):** Not available

**Solubility In Water (20°C):** Soluble

**% Volatile (By Weight)** 81%

**PH:** 11.5 – 12.5 (1% solution)

**Coefficient Of Water/Oil Distribution:** Not available

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** **Yes** **X** **No**

**If No, Under Which Conditions?:**

**Incompatibility To Other Substances:** **Yes** **X** **No**

**If So, Which Ones:** Oxidizing compounds

**Conditions to Avoid:** None known

**Hazardous Decomposition Products:** CO and CO2

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** Mists are corrosive – causes burns to the respiratory tract.

**Skin Contact:** Corrosive – causes burns.

**Eye Contact:** Corrosive – causes burns.

**Ingestion:** This product may be harmful or fatal if swallowed.

**CHRONIC HEALTH EFFECTS:** None known

**Other Health Effects:** None known

**LD 50 of Material (Specify Species and Routes):** Tetrasodium Ethylene Diamine Tetraacetate (5%): 200 g/kg, Oral (Rat)
Sodium Hydroxide (7%): 7142.9 mg/kg, Dermal (Rabbit)

**LC 50 of Material (Specify Species and Routes):** Not available

**Exposure (Limits):** Sodium Hydroxide: 2 mg/m3 Ceiling Exposure Value, ACGIH and OSHA.

**Irritancy of Material:** Severe skin, eye and respiratory tract irritant.

**Sensitization of Material:** None known

**Synergistic Materials:** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** Tetrasodium ethylene diamine tetraacetate has been reported to cause birth defects in animals at very high doses not expected in occupational exposure. These effects were observed at doses that were toxic to the mother.

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity** Toxic to aquatic life.

**FISH**

Sodium Hydroxide (7%) LC50 (Rainbow Trout): 2052 mg/l
LC50 (Chinook Salmon): 271 mg/l

Tetrasodium Ethylene Diamine Tetraacetate (5%) LC50 (Lepomis Macrochirus) 96 h, static: 820 mg/l
LC50 (Pimephales Promelas) 96 h, static: 1196 mg/l

**FRESHWATER ALGAE**

Tetrasodium Ethylene Diamine Tetraacetate (5%) EC50 (Desmodesmus Subspicatus) 72 h: 20.2 mg/l

**Environmental Fate**

**Biodegradability:** Not available

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Not available

## SECTION 13 DISPOSAL CONSIDERATIONS

**Deactivating Chemicals:** Neutralize with dilute acetic acid to pH 6 to 9.

**Waste Disposal:** Dispose absorbed neutralized material in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Flush with copious amounts of water and neutralize with dilute acetic acid.

**Disposal of Packaging:** Dispose of packaging in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Sodium Hydroxide Solution

**Class:** 8

**Packing group:** II

**UN:** 1824

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Sodium Hydroxide Solution

**Class:** 8

**Packing group:** II

**UN:** 1824

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: E

**Canadian DSL Inventory**: All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

**CPR Compliance:** This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**USA**

**TSCA Inventory:** All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

**California Proposition 65**: Not Listed

**MA, New Jersey and Pennsylvania Right to Know Lists:** Listed

**CERCLA/SARA – Section 302:** Tetrasodium Ethylene Diamine Tetraacetate: Not Listed
Sodium Hydroxide: Not Listed

**SARA (311, 312) Hazard Class:** Tetrasodium Ethylene Diamine Tetraacetate: Not Listed
Sodium Hydroxide: Listed

**CERCLA/SARA – Section 313:** Tetrasodium Ethylene Diamine Tetraacetate: Not Listed
Sodium Hydroxide: Not Listed

**INTERNATIONAL** Not available

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **June 9, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

**While Capo Industries Ltd. believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Capo Industries Ltd. assumes legal responsibility. They are offered solely for your consideration and verification. Any use of this data and information must be determined by the user to be in accordance with applicable Federal, Provincial and local laws and regulations.**

# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Chlorine Tabs 200gm** **WHMIS:** C, D1B, D2B

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Trichloro-s-triazinetrione

**Chemical Family:** Chloroisocyanurates

**Chemical Formula:** C3 Cl3 N3 O3

**Trade Name & Synonyms:** Trichloroisocyanuric Acid, TCCA, Trichlor

**Molecular Weight:** 232.41

**Material Use**: Pool or Spa water chlorination

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:**

Oxidizing solid, Category 2
Acute toxicity, Oral, Category 4
Skin corrosion/irritation, Category 1C
Acute toxicity, Inhalation, Category 2
Specific target organ toxicity, Single exposure, Respiratory tract irritation, Category 3
Hazardous to aquatic environment, long-term hazard, Category 1

**Symbol(s)**

**Signal Word** Danger

**Hazard statements**

H272 May intensify fire; oxidizer.
H302 Harmful is swallowed.
H314 Causes severe skin burns and eye damage.

H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H410 Very toxic to aquatic life with long-lasting effects.

**Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220 Keep/Store away from clothing and combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P260 Do not breathe dust.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/ face protection.
P284 In case of inadequate ventilation wear respiratory protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor.
P320 Specific treatment is urgent (see first aid on this label).
P363 Wash contaminated clothing before use.
P370+P378 In case of fire: Use water spray for extinction.
P391 Collect spillage.
P403+P233 Store in a well-ventilated area. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulations.

**NFPA: 3 Health, 0 Fire, 2 Reactivity Special Hazard Warning: OXIDIZER**

**HMIS: 3 Health, 0 Fire, 2 Reactivity**

# SAFETY DATA SHEET

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Trichloro-s-triazinetrione | 87-90-1 | 99.0 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. If person is not breathing, give artificial respiration, by mouth to mouth if possible. Contact a physician

**Skin Contact:** Take off contaminated clothing. Wash skin thoroughly with soap and water for 15 minutes. Seek medical attention.

**Eye Contact:** Flush eyes with plenty of water for 15 minutes. Seek medical attention.

**Ingestion:** Drink 2 or 3 glasses of water, rinse mouth. Do not give anything to an unconscious person. Do not induce vomiting, unless directed to do so by a doctor. Contact a physician immediately.

**Note to physicians** Probable mucosal damage may contraindicate the use of gastric lavage. Corrosive. Treat symptomatically and supportively.

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Small quantities of water will react with this material which will form nitrogen trichloride, which is violently explosive.

**Unusual Fire or Explosion Hazards:** When heated to decomposition, may release poisonous and corrosive fumes of nitrogen trichloride, chlorine, nitrous oxides, cyanates, carbon monoxide and carbon dioxide.

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Water only. Large amounts of water may be needed and the flow of water should not be stopped until the fire/reaction has stopped.

**Instructions to the Fire Fighters:** Cool containers with water spray. On small fires, use water spray or fog. On large fires, use heavy deluge or fog streams. Flooding amounts of water may be required before extinguishment can be accomplished.

**Fire Fighting Protective Equipment:** Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) in positive pressure mode.

# SAFETY DATA SHEET

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Prevent spillage from contaminating soil or entering waterways, sewers, drains and confined areas. If material is spilled, clean up as soon as possible to prevent contamination with a material with which it will react. Keep spilled material dry. Sweep up and place material in a dry, clean and labeled container.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid skin, eye and clothing contact. Wash hands thoroughly with soap and water after handling.

**Ventilation Requirements:** Local exhaust ventilation.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry and well ventilated area away from incompatible materials.

**Storage Requirements:** Do not store material at temperatures above 60°C/140°F. Available chlorine loss can be as little as 0.1% per year at ambient temperatures. Do not allow water to get into container. Keep containers tightly closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Nitrile or neoprene gloves if skin contact is likely.

**Eye (Specify):** Safety goggles/glasses or face shield if eye contact is likely.

**Respiratory (Specify):** Use NIOSH/MSHA approved dust or vapour mask when airborne exposure limits are exceeded. An approved respirator with an acid gas (for chlorine) and dust prefilter may be adequate.

**Other (Specify):** Body covering clothes and boots. Safety shower and eye wash stations are close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

| | |
|---|---|
| **Physical State:** | **Gas** **Liquid** **Solid** **X** |
| **Odour & Appearance:** | White opaque tablets, chlorine odour |
| **Odour Threshold (ppm):** | Not available |
| **Flammability:** | **Yes** **No** **X** |
| **If Yes, Under Which Conditions?:** | |
| **Auto Ignition Temperature (Celsius):** | Not applicable |
| **Upper Explosion Limit (% By Volume):** | Not applicable |
| **Lower Explosion Limit (% By Volume):** | Not applicable |
| **Decomposition Temp (°C)** | 225°C |
| **Specific Gravity:** | Not applicable |
| **Viscosity:** | Not applicable |
| **Vapour Pressure (mm):** | Not applicable |
| **Vapour Density (Air-1):** | Not applicable |
| **Flashpoint (°C)** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Boiling Point (°C):** | Not applicable |
| **Freezing Point (°C):** | Not applicable |
| **Solubility In Water (20°C):** | Soluble |
| **% Volatile (By Weight)** | Not applicable |
| **PH:** | 2.7 – 3.3 (1% solution) |
| **Coefficient Of Water/Oil Distribution:** | Not applicable |

## SECTION 10 STABILITY AND REACTIVITY

| | |
|---|---|
| **Chemical Stability:** | **Yes** **No** **X** |
| **If No, Under Which Conditions?:** | Stable when dry. Reacts non-violently with water to form a bleach solution. |
| **Incompatibility To Other Substances:** | **Yes** **X** **No** |
| **If So, Which Ones:** | Avoid contact with water on concentrated forms of this material. Avoid contact with easily oxidizable organic materials – ammonia, urea or similar nitrogen containing compounds, inorganic reducing compounds, calcium hypochlorite and alkalis. Also other isocyanurates. |
| **Conditions to Avoid:** | Contamination can cause spontaneous combustion at room temp. |
| **Hazardous Decomposition Products:** | Chlorine gas and traces of phosgene can be liberated at temperatures greater than 225°C. |

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** Irritation or burns to mucous membranes and respiratory tract.

**Skin Contact:** Irritation and may cause burns.

**Eye Contact:** Irritation and may cause burns.

**Ingestion:** Irritation or burns to the gastrointestinal tract.

**CHRONIC HEALTH EFFECTS:** Prolonged exposure may cause damage to the respiratory system. Chronic inhalation exposure may cause impairment of lung function and permanent lung damage.

**Other Health Effects:** Asthma, respiratory and cardiovascular diseases.

**LD 50 of Material (Specify Species and Routes):** 406 mg/kg, Oral (Rat), >2000 mg/kg, Dermal (Rabbit)

**LC 50 of Material (Specify Species and Routes):** 0.09-0.29 mg/l, Inhalation (Rat)

**Exposure (Limits):** Chlorine – TWA: 0.5 ppm, STEL: 1 ppm

**Irritancy of Material** Strong irritant to skin, eye, nose and throat.

**Sensitization of Material** None

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Aquatic toxicity:**

**96 h LC50, Fish** 0.13-0.5 mg/l (Lepomis macrochirus)

**48 h LC50, Daphnia magna** 0.21 mg/l

**Environmental Fate**

**Biodegradability:** Material is subject to hydrolysis. Acids produced by hydrolysis are biodegradable.

**Bioaccumulative Potential:** Not expected to bioaccumulate in the aquatic environment.

**Mobility In Soil:** Expected to be highly mobile in soil.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose of in accordance to all applicable federal, provincial and local laws and

regulations.

**Safe Handling of Residues:** See above

**Disposal of Packaging:** See above

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Trichloroisocyanuric Acid - Dry

**Class:** 5.1

**Label:** Oxidizing substances (5.1)

**Packing Group:** II

**UN:** 2468

1 kg and under are LIMITED QUANTITY

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Trichloroisocyanuric Acid - Dry

**Class:** 5.1

**Label:** Oxidizing substances (5.1)

**Packing Group:** II

**UN:** 2468

**Emergency Guide No. 140**

**IMDG**

**Proper shipping name:** Trichloroisocyanuric Acid - Dry

**Class:** 5.1

**Label:** Oxidizing substances (5.1)

**Packing Group:** II

**UN:** 2468

**EmS No:** F-A, S-Q

**IATA/ICAO**

**Proper shipping name:** Trichloroisocyanuric Acid - Dry

**Class:** 5.1

**Label:** Oxidizing substances (5.1)

**Packing Group:** II

**UN:** 2468

**ERG No:** 5L

For shipments by vessel or bulk quantities (>882 pounds) by motor vehicle or aircraft, add “Marine Pollutant (Trichloroisocyanuric Acid)” to shipping description and label containers with Marine Pollutant markings.

## SECTION 15 REGULATORY INFORMATION

**CANADA** Listed in DSL

**WHMIS**: C, D1B, and D2B

**USA** Reported in the EPA TSCA Inventory.

**EPA Registration No.** 83936-3

**Emergency overview in accordance to EPA Master Label:**

Danger. Hazards to humans and domestic animals. Highly corrosive. Causes irreversible damage or skin burns. May be fatal if inhaled, or absorbed through skin. Strong oxidizing agent. This pesticide is toxic to fish and aquatic organisms.

**SARA (311,312)** This product is categorized as an immediate health hazard, and fire and reactivity physical hazard.

**Massachusetts, New Jersey and Pennsylvania Right to Know Lists:** Listed

**INTERNATIONAL**

**Australia, China, and Korea:** Listed on their chemical inventory lists.

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **May 10, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

**While Capo Industries Ltd. believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Capo Industries Ltd. assumes legal responsibility. They are offered solely for your consideration and verification. Any use of this data and information must be determined by the user to be in accordance with applicable Federal, Provincial and local laws and regulations.**

# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Clarifier** **WHMIS: E**

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Not applicable

**Chemical Family:** Polynuclear Inorganic Salt

**Chemical Formula:** Not applicable

**Trade Name & Synonyms:** Poly Aluminum Hydroxychlorosulphate

**Molecular Weight:** Not applicable

**Material Use**: Flocculant

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** Corrosive to metals, Category 1
Serious eye damage/eye irritation, Category 1

**Symbol(s)**

**Signal Word** Danger

**Hazard statements** H290 May be corrosive to metals.
H318 Causes serious eye damage.

**Precautionary statements** P234 Keep only in original packaging.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor.
P390 Absorb spillage to prevent material-damage.

P406 Store in a corrosion resistant container with a resistant inner liner.

**HMIS: 2 Health, 0 Flammability, 1 Reactivity**

**NFPA: 2 Health, 0 Fire, 1 Reactivity**

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Aluminum chloride hydroxide sulphate | 39290-78-3 | 33 – 40 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** No expected damage due to low volatility. Remove person to fresh air if mists are irritating.

**Skin Contact:** Wash hands thoroughly with soap and water.

**Eye Contact:** Flush eyes with plenty of water for 15 minutes. Seek medical attention.

**Ingestion:** Drink 2 or 3 glasses of water to dilute. Do not induce vomiting. Contact a physician immediately.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Hydrogen chloride gas, aluminum oxides, and oxides of sulphur.

**Unusual Fire or Explosion Hazards:** None

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** Keep containers cool by spraying with water if exposed to fire.

**Fire Fighting Protective Equipment:** Wear self-contained breathing apparatus and protective clothing.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Avoid runoff into storm sewers and ditches which lead to waterways. Restrict access until clean-up operations are complete. Soak spill with absorbent material and transfer to plastic drums. Spill may be neutralized with soda ash to a pH between 6 and 9.

# SAFETY DATA SHEET

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices**: Avoid contact with eyes, skin and clothing. Avoid contact with aluminum and zinc. Wash hands thoroughly after use.

**Ventilation Requirements:** Local exhaust ventilation.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area. Avoid temperatures above 40°C

**Storage Requirements:** Material may be stored in tightly closed shipping containers. Containers of this material may be hazardous when empty, since they retain product residues (vapours, liquids); observe all warnings and precautions listed for the product. Do not use metal containers. Store in dry rubber lined, plastic, or FRP vessels.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Neoprene or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** If mists are encountered, use NIOSH-approved respirator.

**Other (Specify):** Impermeable clothing and footwear if contact is likely.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **X** **Solid**

**Odour & Appearance:** Clear blue, odourless

**Odour Threshold (ppm):** Not applicable

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Not applicable

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

**Decomposition Temp (°C)** Not available

**Specific Gravity:** 1.18 – 1.38

**Viscosity:** Not available

| | |
|---|---|
| **Vapour Pressure (mm):** | 17 mm/hg |
| **Vapour Density (Air-1):** | 1.3 |
| **Flashpoint (°C)** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Boiling Point (°C):** | 100°C |
| **Freezing Point (°C):** | -12°C |
| **Solubility In Water (20°C):** | Soluble |
| **% Volatile (By Weight)** | 80% (water) |
| **PH:** | 2.1 – 3.1 |
| **Coefficient Of Water/Oil Distribution:** | Not available |

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** **Yes** **X** **No**

**If No, Under Which Conditions?:**

**Incompatibility To Other Substances:** **Yes** **X** **No**

**If So, Which Ones:** Strong oxidizers, strong reducing agents. Reacts with aluminum or zinc to form hydrogen gas.

**Conditions to Avoid:** Mineral acids, excessive heat and bases/alkalis.

**Hazardous Decomposition Products:** Hydrogen chloride gas, aluminum oxides, and oxides of sulphur.

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** None expected on short-term use.

**Skin Contact:** Irritant

**Eye Contact:** Irritant, and may cause burns.

**Ingestion:** Small quantities – nausea, vomiting, and stomach cramps.
Large quantities – ulcerations and necrosis of the mucous membranes in the throat, mouth and esophagus in addition to small quantity effects, liver or kidney damage and intense thirst.

**CHRONIC HEALTH EFFECTS:** Prolonged skin contact may cause dermatitis. Mists may irritate respiratory tract if exposure is prolonged.

**Other Health Effects:** None known

**LD 50 of Material (Specify Species and Routes):** Not available

**LC 50 of Material (Specify Species and Routes):** Not available

**Exposure (Limits):** Not established

**Irritancy of Material** Skin and eye irritant.

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity**

**Fish Test Results:**

**LC50 96 h Fathead minnow (Pimephales promelas):** 1074 mg/l

**LC50 96 h Rainbow trout (Oncorhyncus mykiss):** 1768 mg/l

**Invertebrate Test Results:**

**LC50 48 h Water flea (Daphnia magna):** 1698 mg/l

**LC50 48 h Water flea (Ceriodaphnia dubia):** 1106 mg/l

**Environmental Fate**

**Biodegradability:** The methods for determining biodegradability are not applicable to inorganic substances.

**Bioaccumulative Potential:** The product is not expected to bioaccumulate.

**Mobility In Soil:** Completely soluble.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Deactivating Chemicals:** Neutralize with soda ash to a pH between 6 and 9.

**Waste Disposal:** Dispose absorbed material in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Flush with copious amounts of water to reuse containers if possible.

**Disposal of Packaging:** Reuse container if possible. Otherwise, dispose containers in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Corrosive liquid, acidic, inorganic, n.o.s. (Aluminum chloride hydroxide sulfate)

**Class:** 8

**Packing group:** III

**UN number:** 3264

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Corrosive liquid, acidic, inorganic, n.o.s. (Aluminum chloride hydroxide sulfate)
**Class:** 8
**Packing group:** III
**UN number:** 3264

**ICAO/IATA**

**Proper shipping name:** Corrosive liquid, acidic, inorganic, n.o.s. (Aluminum chloride hydroxide sulfate)
**Class:** 8
**Packing group:** III
**UN number:** 3264

**IMDG**

**Proper shipping name:** Corrosive liquid, acidic, inorganic, n.o.s. (Aluminum chloride hydroxide sulfate)
**Class:** 8
**Packing group:** III
**UN number:** 3264

## SECTION 15 REGULATORY INFORMATION

**CANADA** All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

**WHMIS**: E

**USA** All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

**INTERNATIONAL**

**European Union (EU)** All components of this product are included on the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **January 1, 1996**
**Date Revised:** **December 1, 2018**

**Additional Notes Or References:**

**While Capo Industries Ltd. believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Capo Industries Ltd. assumes legal responsibility. They are offered solely for your consideration and verification. Any use of this data and information must be determined by the user to be in accordance with applicable Federal, Provincial and local laws and regulations.**

# Safety Data Sheet

## Product Identifier

**Manufacturer's Name: CAPO INDUSTRIES LTD.**
**Street Address: 1200 Corporate Drive**
**City: Burlington, Ontario, CANADA**
**Postal Code: L7L 5R6**

**Emergency Telephone: Canutec (613) 996-6666 (Collect)(Transport)**

## SECTION 1. IDENTIFICATION

| | |
|---|---|
| **Product Identifier** | Defoamer |
| **Other Means of Identification** | Foam Free |
| **Recommended Use** | Spa Treatment |
| **Restrictions on Use** | Not available |
| **Initial Supplier Identifier** | Capo Industries Ltd. |
| **Emergency Telephone Number** | **(**905) 332-6626 (non-Transport) |

## SECTION 2. HAZARD IDENTIFICATION

| | |
|---|---|
| **GHS Classification** | None |
| **Label Elements** | None |
| **Signal Word** | None |
| **Hazard Statement(s):** | None |
| **Precautionary Statement(s):** | None |
| **Other Hazards** | None |

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Concentration | Common name / Synonyms | Other identifiers |
|---|---|---|---|---|
| No Regulated Components | | | | |

**Defoamer**

## SECTION 4. FIRST-AID MEASURES

**Inhalation** Remove person to fresh air if breathing is difficult. Get medical help.

**Skin Contact** Wash thoroughly with soap and water for 15 minutes. Get medical help if irritation persists.

**Eye Contact** Flush eyes with plenty of water for 15 minutes. Get medical help if irritation persists.

**Ingestion** Rinse mouth with water. Do not give victim anything to drink if they are unconscious. Give several small portions of water to drink. Do not induce vomiting.

**Most Important Symptoms and Effects, Acute and Delayed** May cause skin and/or eye irritation.

**Immediate Medical Attention and Special Treatment** Not available

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media** Water fog, $CO_2$, foam or dry chemical.

**Unsuitable Extinguishing Media** Not available

**Specific Hazards Arising from the Product** None known

**Special Protective Equipment and Precautions for Fire-Fighters**
Wear full protective clothing and a self-contained breathing apparatus.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, and Emergency Procedures**
Wear appropriate personal protective equipment. Block any potential routes to water systems.

**Methods for Containment and Cleaning Up**
Soak up with absorbent material and place in a labeled container for disposal. Large spills may require a vacuum. Wash spill area with water.

## SECTION 7. HANDLING AND STORAGE

**Precautions for Safe Handling**
Avoid skin and eye contact. Wash hands thoroughly after handling.

**Conditions for Safe Storage**
Store in a cool, dry well ventilated area. Protect from freezing. Keep containers tightly closed. Store away from incompatible materials.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| | |
|---|---|
| **Control Parameters** | No occupational exposure limits noted for ingredients. |
| **Appropriate Engineering Controls** | None required. |
| **Individual Protection Measures** | |
| **Eye/Face Protection** | Safety glasses/goggles if eye contact is likely. |
| **Skin Protection** | Gloves if skin contact is likely. |
| **Respiratory Protection** | Not required. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance** | Opaque, white liquid |
| **Odour** | Mild odour |
| **Odour Threshold** | Not available |
| **pH** | 8.0 – 10.5 |
| **Melting Point and Freezing Point** | 0°C |
| **Initial Boiling Point and Boiling Range** | Not available |
| **Flash Point** | Not available |
| **Evaporation Rate** | Not available |
| **Flammability** | Not flammable |
| **Upper and Lower Flammability or Explosive Limit** | Not determined |
| **Vapour Pressure** | Not available |
| **Vapour Density (air = 1)** | Not available |
| **Relative Density (water = 1)** | 0.995 – 1.005 |
| **Solubility in Water** | Dispersible |
| **Solubility in Other Liquids** | Not available |

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**Defoamer**

**Partition Coefficient, n-Octanol / Water (Log Kow)** Not available

**Auto-ignition Temperature** Not applicable

**Decomposition Temperature** Not available

**Viscosity** Not available

## SECTION 10. STABILITY AND REACTIVITY

**Reactivity** None

**Chemical Stability** Stable under normal conditions.

**Possibility of Hazardous Reactions** None known

**Conditions to Avoid** Avoid excessive heat for prolonged periods of time.

**Incompatible Materials** Oxidizing compounds

**Hazardous Decomposition Products** CO, $CO_2$, $SiO_2$ and formaldehyde

## SECTION 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure**

__ Inhalation **X** Skin contact **X** Eye contact __ Ingestion

**Acute Toxicity**

**$LC_{50}$ (Inhalation, 4hr)**
ATE mix: Not available

**$LD_{50}$ (Oral)**
ATE mix: > 5000 mg/kg, Oral (Rat)

**$LD_{50}$ (Dermal)**
ATE mix: > 5000 mg/kg, Dermal (Rat)

**Ingestion** No data available

**Inhalation** No data available

**Skin Corrosion / Irritation** May cause skin irritation.

**Serious Eye Damage / Irritation** May cause eye irritation.

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**Defoamer**

**STOT (Specific Target Organ Toxicity) - Single Exposure** No data available.

**Aspiration Hazard** No data available.

**STOT (Specific Target Organ Toxicity) - Repeated Exposure** No data available.

**Respiratory and/or Skin Sensitization** No data available

**Carcinogenicity**
This product or one of its components present 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

**Reproductive Toxicity**

**Development of Offspring** None known

**Sexual Function and Fertility** None known

**Effects on or via Lactation** None known

**Germ Cell Mutagenicity** None known

**Interactive Effects** None known

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Not available

**Persistence and Degradability** Not available

**Bioaccumulative Potential** Not available

**Mobility in Soil** Not available

**Other Adverse Effects** Not available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal Methods** Dispose absorbed material in accordance with federal, provincial, and local regulations.

## SECTION 14. TRANSPORT INFORMATION

| Regulation | UN No. | Proper Shipping Name | Technical Name (for N.O.S. entry) | Transport Hazard Class(es) | Packing Group |
|---|---|---|---|---|---|
| No Regulated Components | None | None | None | None | None |

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**Defoamer**

**Special Precautions** None

**Environmental Hazards** None

## SECTION 15. REGULATORY INFORMATION

**Safety, Health and Environmental Regulations**

**Canada**

**DSL/NDSL**

All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

**USA**

**TSCA**

All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory list or exempt.

## SECTION 16. OTHER INFORMATION

**Prepared By (Group, Department):** Quality Assurance **Telephone:** (905) 332-6626

**Preparation Date:** March 13, 2017
**Date of Latest Revision:** March 7, 2022
**Additional Notes or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**ENERGIZE** **WHMIS:** D2B

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Not applicable

**Chemical Family:** Not applicable

**Chemical Formula:** Mixture

**Trade Name & Synonyms:** Not applicable

**Molecular Weight:** Not applicable

**Material Use**: Spa water treatment chemical

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** H315 Skin corrosion/irritation, Category 2
H319 Serious eye damage/eye irritation, Category 2A
H335 Specific target organ toxicity, Single exposure, Respiratory tract irritation

**Label Elements**

**Symbol(s)**

**Signal Word** Warning

**Hazard statements** Causes skin and serious eye irritation.

**Precautionary statements** Avoid skin and eye contact. Wear gloves and safety glasses when handling. Wash hands thoroughly after use. If contact with eyes, flush with copious amounts of water for 15 minutes. Avoid breathing in dusts/fumes/vapours. If inhaled, remove person to fresh air and seek medical attention.

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Pentapotassium Bis(Peroxymonosulphate) Bis(Sulphate) | 70693-62-8 | 60 – 100 |
| Dipotassium Peroxodisulphate | 7727-21-1 | 0 – 5 |
| Sodium Carbonate | 497-19-8 | 10 – 30 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. If difficulty breathing, give artificial respiration and seek medical attention.

**Skin Contact:** Wash thoroughly with soap and water.

**Eye Contact:** Flush eyes with copious amounts of water and seek medical attention.

**Ingestion:** Drink 2 or 3 glasses of water or milk to dilute material. Do not induce vomiting. Contact a physician.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** At elevated temperatures of 100°C may liberate oxides of sulphur and carbon.

**Unusual Fire or Explosion Hazards:** None known

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media suitable for extinguishing surrounding fire.

**Instructions to the Fire Fighters:** See below

**Fire Fighting Protective Equipment:** Wear full protective clothing and a self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Prevent material from entering drains, sewers, and waterways. Sweep up and place metal waste containers for disposal.

# SAFETY DATA SHEET

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid contact with skin and eyes. Avoid breathing in dust. Wear gloves and safety glasses when handling. Wash hands thoroughly after use.

**Ventilation Requirements:** Use in a well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Do not mix directly with other chemicals. Keep containers tightly closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** General exhaust ventilation to keep airborne contaminants below exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** Wear air-purifying respirator with dust/mist cartridge if in a non-ventilated area.

**Other (Specify):** Impervious clothing if contact is likely. Eye wash and shower stations are close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **Solid** **X**

**Odour & Appearance:** Opaque, white granular, odourless

**Odour Threshold (ppm):** Not applicable

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Not applicable

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

**Decomposition Temp (°C)** Not available

**Specific Gravity:** Not available

**Viscosity:** Not applicable

**Vapour Pressure (mm):** Not applicable

**Vapour Density (Air-1):** Not applicable

| | |
|---|---|
| **Flashpoint (°C)** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Boiling Point (°C):** | Not available |
| **Freezing Point (°C):** | Not available |
| **Solubility In Water (20°C):** | Soluble |
| **% Volatile (By Weight)** | Not applicable |
| **PH:** | 6.5 – 7.5 (1% solution) |
| **Coefficient Of Water/Oil Distribution:** | Not available |

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** **Yes** **X** **No**

**If No, Under Which Conditions?:**

**Incompatibility To Other Substances:** **Yes** **X** **No**

**If So, Which Ones:** Heavy metal salts, halogenated compounds, cyanides, aluminum, and sulfamic acid.

**Conditions to Avoid:** Avoid extreme heat.

**Hazardous Decomposition Products:** Oxides of sulphur and carbon.

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** Dust may cause irritation to respiratory tract.

**Skin Contact:** Prolonged skin contact will cause irritation.

**Eye Contact:** Eye contact will cause irritation or burns.

**Ingestion:** Severe gastrointestinal irritation, nausea, vomiting and diarrhea.

**CHRONIC HEALTH EFFECTS:** None known

**Other Health Effects:** None known

**LD 50 of Material (Specify Species and Routes):** Pentopotassium Bis(Peroxymonosulphate)Bis(Sulphate) 500 mg/kg, Oral (Rat), >2000 mg/kg, Dermal (Rabbit)
Dipotassium Peroxodisulphate 802 mg/kg, Oral (Rat), >10000 mg/kg, Dermal (Rabbit)
Sodium Carbonate 4090 mg/kg, Oral (Rat), 2210 mg/kg, Dermal (Mouse).

**LC 50 of Material (Specify Species and Routes):** Pentopotassium Bis(Peroxymonosulphate)Bis(Sulphate) >5 mg/l, Inhalation 4 h (Rat)

**Exposure (Limits):** Pentopotassium Bis(Peroxymonosulphate)Bis(Sulphate), AEL* (Dupont): 1mg/m3, 15 minute TWA, Dipotassium Peroxodisulphate, TLV (ACGIH): 0.1 mg/m3, TWA as persulphate.

**Irritancy of Material** Eye, skin and respiratory tract irritant.

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity**

Pentopotassium Bis(Peroxymonosulphate)Bis(Sulphate) – 96 h LC50 Cyprinodon Variegatus (sheepshead minnow): 1.09 mg/l

- 72 h ERC50 Algae: 1mg/l
- 48 h EC50 Daphnia: 3.5 mg/l

Dipotassium Peroxodisulphate – 48 h LC50 Daphnia Magna (water flea): 92 mg/l

**Environmental Fate**

**Biodegradability:** Readily biodegradable

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Not available

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose of material in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Flush residues with lots of water.

**Disposal of Packaging:** Dispose of containers in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: D2B

**CPR Compliance** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

**USA** Not available

**INTERNATIONAL** Not available

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **May 28, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# Safety Data Sheet

## Product Identifier

**Manufacturer's Name:** **CAPO INDUSTRIES LTD.**
**Street Address:** **1200 Corporate Drive**
**City:** **Burlington, Ontario, CANADA**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Transport)**

## SECTION 1. IDENTIFICATION

| | |
|---|---|
| **Product Identifier** | Filter Cleaner |
| **Other Means of Identification** | 701709 |
| **Recommended Use** | Filter Rinse |
| **Restrictions on Use** | Not available |
| **Initial Supplier Identifier** | Capo Industries ltd. |
| **Emergency Telephone Number** | 1-905-332-6626 (Non-Transport) |

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** Serious eye damage/Eye Irritation Category 1
Skin Irritation Category 2

**Symbol(s)**

**Signal Word** Danger

**Hazard statement(s)** H315 Causes skin irritation.
H318 Causes serious eye damage.

**Precautionary statements**

**Preventive:** P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection.

**Response:** P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see first aid on this label).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

**Other Hazards** No additional information available.

.

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Sodium Bisulphate | 7681-38-1 | 45 – 70 |
| Sulphamic Acid | 5329-14-6 | 30 - 60 |

## SECTION 4 FIRST AID MEASURES

**General Advice:** Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

**If inhaled** If unconscious, place in recovery position and seek medical advice.
If Symptoms persist, call a physician.
Move to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.

**In Case of Skin Contact:** If skin irritation persists, call a physician.
Wash off immediately with plenty of water, also under the eyelids for at least 15 minutes.
Remove contaminated clothing and shoes.

**In Case of Eye Contact** Rinse immediately with plenty of water, also under the eyelids for at least 15 minutes.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

**If Swallowed** Keep respiratory tract, clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician or POISON CONTROL CENTRE.

## SECTION 5 FIRE – FIGHTING MEASURES

**Suitable Extinguishing Media:** Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical

**Unsuitable Extinguishing Media**: High volume water jet.

**Specific Hazards During Firefighting:** Do not allow run-off from firefighting to enter drains or water courses.

**Hazardous Combustion Products:** No hazardous combustion products are known.

**Further Information:** Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, and Emergency Procedures:**
Use personal protective equipment – PPE.

**Environmental Precautions:** Prevent product entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform the respective authorities.

**Methods for Containment and Cleaning Up:** Neutralize with chalk, alkali solution or ammonia.
Keep in suitable, closed containers for disposal.

**Special Protective equipment for firefighters**: Wear self-contained breathing apparatus for firefighters if necessary.

## SECTION 7 HANDLING AND STORAGE

**Advice on Safe Handling:**
Avoid formation of respirable particles.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking eating and drinking should be prohibited in the application area.'
Dispose of rinse water in accordance with local and national regulations.

**Conditions for Safe Storage**
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Do not restore near acids.
Electrical installations / working material must comply with the technological safety standards

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Personal Protective Equipment**

**Respiratory Protection:** Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

**Hand Protection: Remarks:** The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye Protection: Eye wash bottle with pure water
Tightly fitting safety goggles

**Skin and Body Protection:** Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the workplace.

**Hygiene measures:** When using do not eat or drink or smoke.
Wash Hands before breaks and at the end of workday.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

| | | | | |
|---|---|---|---|---|
| **Physical State:** | **Gas** | **Liquid** | **Solid** | **X** |
| **Odour & Appearance:** | Purple beads, acidic odour | | | |
| **Odour Threshold (ppm):** | No data available | | | |
| Flammability: | No data available | | | |
| **If Yes, Under Which Conditions?:** | | | | |
| **Auto Ignition Temperature (Celsius):** | No data available | | | |
| **Upper Explosion Limit (% By Volume):** | No data available | | | |
| **Lower Explosion Limit (% By Volume):** | No data available | | | |
| **Decomposition Temp (°C)** | No data available | | | |
| **Specific Gravity:** | No data available | | | |
| **Viscosity:** | No data available | | | |
| **Vapour Pressure (mm):** | No data available | | | |
| **Vapour Density (Air-1):** | No data available | | | |
| **Flashpoint (°C)** | No data available | | | |
| **Evaporation Rate** | No data available | | | |
| **Boiling Point (°C):** | No data available | | | |
| **Freezing Point (°C):** | No data available | | | |
| **Solubility In Water (20°C):** | Soluble | | | |
| **% Volatile (By Weight)** | No data available | | | |
| **PH:** | 1.7 (1% solution) | | | |
| **Coefficient Of Water/Oil Distribution:** | No data available | | | |

## SECTION 10 STABILITY AND REACTIVITY

**Reactivity** No decomposition if stored and applied as directed.

**Chemical Stability** Stable under normal conditions.

**Possibility of Hazardous Reactions:** No decomposition if stored and applied as directed.

**Filter Cleaner**

**Conditions to Avoid** High flames and sparks.

**Incompatible Materials** Reducing agents, strong bases, and strong oxidizing materials.

## SECTION 11 TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure**

**X** Inhalation **X** Skin contact **X** Eye contact **X** Ingestion

**Acute Toxicity**

**Product:** No data available

**Skin corrosion/irritation**: Causes skin irritation

**Serious eye damage/eye irritation**: Causes serious eye damage

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** No data available

**Component: 7681-38-1**

**Acute inhalation toxicity:** Oral (LD50, Rat) = 2140mg/kg
Inhalation (LD50, Rat) = > 2.4 mg/L 4 hr (Dust)

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity** This product readily dissolves in water to form a weak acid solution. A 0.05% or greater (by weight) solution of this product will likely be acutely harmful to aquatic life.

**Environmental Fate**

**Biodegradability:** No data available

**Biaccumulative Potential:** No data available

**Mobility In Soil:** No data available

## SECTION 13 DISPOSAL CONSIDERATIONS

**Disposal Methods**

Waste from residues: Dispose of in accordance with federal, provincial, local, state and federal regulations.

Contaminated packaging: Empty remaining contents
Dispose of unused products.
Do not re-use empty containers.

## SECTION 14 TRANSPORTATION INFORMATION

| Regulation | UN No. | Proper Shipping Name | Technical Name (for N.O.S. entry) | Transport Hazard Class(es) | Packing Group |
|---|---|---|---|---|---|
| TDG | UN1759 | Corrosive Solid, N.O.S. | Sulphamic Acid | 8 | III |
| US DOT | UN1759 | Corrosive Solid, N.O.S. | Sulphamic Acid | 8 | III |
| IATA | UN1759 | Corrosive Solid, N.O.S. | Sulphamic Acid | 8 | III |
| IMDG | UN1759 | Corrosive Solid, N.O.S. | Sulphamic Acid | 8 | III |

**Special Precautions** Limited Quantity is 5kg and under.

## SECTION 15 REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the Hazardous products regulations (HPR) and the SDS contains all the information required by the HPR.

**The components of this product are reported in the following inventories:**

TSCA: On TSCA Inventory

DSL: All components of this product are on the Canada DSL

AICS: On the inventory, or in compliance with the inventory

NZIoC: Not in compliance with the inventory

ENCS: Not in compliance with the inventory

KECI: On the inventory, or in compliance with the inventory

PICCS: On the inventory, or in compliance with the inventory

IECSC: On the inventory, or in compliance with the inventory

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.): Quality Assurance Telephone: (905) 332-6626**

**Preparation Date: May 25, 2015**
**Date Revised: June 10, 2024**
**Additional Notes Or References:**

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# MATERIAL SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Metal Guard** **WHMIS:** D2B

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Not applicable
**Chemical Family:** Not applicable
**Chemical Formula:** Not applicable
**Trade Name & Synonyms:** Not applicable
**Molecular Weight:** Not applicable
**Material Use**: Chelating agent

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** H316 Skin corrosion/irritation, Category 3
H319 Serious eye damage/ eye irritation, Category 2A
H335 Specific target organ toxicity, Single exposure, Respiratory tract irritation, Category 3

**Symbol(s)**

**Signal Word** Warning

**Hazard statements** Causes mild skin irritation and serious eye irritation. May cause respiratory tract irritation.

**Precautionary statements** Avoid skin and eye contact. Wear gloves and safety glasses when handling. Wash hands thoroughly after use. If eye contact, flush eyes with copious amounts of water for 15 minutes. Avoid breathing in mists/fumes/vapours. If inhaled, remove person to fresh air and seek medical attention.

# MATERIAL SAFETY DATA SHEET

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Sodium Salt of 1 Hydroxyethylidene-1.1-Diphosphonic Acid | 29329-71-3 | 3 - 7 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** If mists are inhaled, remove to fresh air and seek medical attention

**Skin Contact:** Wash hands thoroughly with soap and water for 15 minutes.

**Eye Contact:** Flush eyes with copious amounts of water for 15 minutes. Seek medical attention if irritation persists.

**Ingestion:** Do not induce vomiting. Drink 2 or 3 glasses of water to dilute material. Contact a physician immediately.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Oxides of carbon and phosphorus.

**Unusual Fire or Explosion Hazards:** None known

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** Containers exposed to intense heat from fires should be cooled with water to prevent vapour pressure buildup which could result in container rupture. Do not allow runoff to enter waterways.

**Fire Fighting Protective Equipment:** Wear full protective clothing and a self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Prevent entry into sewers, drains, or waterways. Dike if needed. Soak up spill with synthetic or natural absorbent and sweep into a clean, dry and labelled container for disposal.

# MATERIAL SAFETY DATA SHEET

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid skin and eye contact. Wear gloves and safety glasses when handling. Wash hands thoroughly after use. Do not ingest. Avoid inhalation of chemical.

**Ventilation Requirements:** Use in a well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Keep away from acids, peroxides, metals, and easily ignitable materials. Keep containers closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation to keep airborne contaminants below exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** None under normal conditions. Wear a NIOSH approved respirator if there isn't adequate ventilation.

**Other (Specify):** Eye wash and shower stations close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

| | | | | |
|---|---|---|---|---|
| **Physical State:** | **Gas** | **Liquid** | **X** | **Solid** |
| **Odour & Appearance:** | Clear blue liquid, mild odour | | | |
| **Odour Threshold (ppm):** | Not applicable | | | |
| **Flammability:** | | **Yes** | **No** | **X** |
| **If Yes, Under Which Conditions?:** | | | | |
| **Auto Ignition Temperature (Celsius):** | Not applicable | | | |
| **Upper Explosion Limit (% By Volume):** | Not applicable | | | |
| **Lower Explosion Limit (% By Volume):** | Not applicable | | | |
| **Decomposition Temp (°C)** | Not applicable | | | |
| **Specific Gravity:** | 1.310 – 1.340 | | | |
| **Viscosity:** | Not available | | | |
| **Vapour Pressure (mm):** | Not applicable | | | |
| **Vapour Density (Air-1):** | Not applicable | | | |
| **Flashpoint (°C)** | Not applicable | | | |

| | |
|---|---|
| **Evaporation Rate** | Not applicable |
| **Boiling Point (°C):** | 100°C |
| **Freezing Point (°C):** | 0°C |
| **Solubility In Water (20°C):** | Soluble |
| **% Volatile (By Weight)** | 56% |
| **PH:** | 4 - 6 |
| **Coefficient Of Water/Oil Distribution:** | Not applicable |

## SECTION 10 STABILITY AND REACTIVITY

| | | | |
|---|---|---|---|
| **Chemical Stability:** | **Yes** | **X** | **No** |
| **If No, Under Which Conditions?:** | | | |
| **Incompatibility To Other Substances:** | **Yes** | **X** | **No** |
| **If So, Which Ones:** | Cyanides | | |
| **Conditions to Avoid:** | High temperatures. | | |
| **Hazardous Decomposition Products:** | CO, CO2, and oxides of phosphorus. | | |

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

| | |
|---|---|
| **Inhalation:** | Severe irritation to respiratory tract if mists are inhaled. |
| **Skin Contact:** | Product may irritate skin. |
| **Eye Contact:** | Strong eye irritant and may cause burns. |
| **Ingestion:** | Gastritis - stomach upset, nausea, and diarrhea. |
| **CHRONIC HEALTH EFFECTS:** | None known |
| **Other Health Effects:** | None known |

**LD 50 of Material (Specify Species and Routes):** 2850 mg/kg, Oral (Rat), >5000 mg/kg, Dermal (Rabbit)

**LC 50 of Material (Specify Species and Routes):** Not available

| | |
|---|---|
| **Exposure (Limits):** | Not established |
| **Irritancy of Material** | Skin, eye and respiratory tract irritant. |
| **Sensitization of Material** | None known |
| **Synergistic Materials** | None known |

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity** Not available

**Environmental Fate**

**Biodegradability:** Not available

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Not available

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose absorbed materials in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Clean up residual with absorbent material. Place in appropriate container and flush with water.

**Disposal of Packaging:** Dispose containers in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: D2B

**CPR Compliance** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

**USA** Not available

**INTERNATIONAL** Not available

# MATERIAL SAFETY DATA SHEET

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **May 28, 2015**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Mini Tabs** **WHMIS:** C, D1B, D2B

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Trichloro-s-triazinetrione
**Chemical Family:** Chloroisocyanurates
**Chemical Formula:** C3 Cl3 N3 O3
**Trade Name & Synonyms:** Trichloroisocyanuric Acid, TCCA, Trichlor
**Molecular Weight:** 232.41
**Material Use**: Pool or Spa water chlorination

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:**
Oxidizing solid, Category 2
Acute toxicity, Oral, Category 4
Skin corrosion/irritation, Category 1C
Acute toxicity, Inhalation, Category 2
Specific target organ toxicity, Single exposure, Respiratory tract irritation, Category 3
Hazardous to aquatic environment, long-term hazard, Category 1

**Symbol(s)**

**Signal Word** Danger

**Hazard statements**
H272 May intensify fire; oxidizer.
H302 Harmful is swallowed.
H314 Causes severe skin burns and eye damage.

H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H410 Very toxic to aquatic life with long-lasting effects.

**Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P220 Keep/Store away from clothing and combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P260 Do not breathe dust.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/ face protection.
P284 In case of inadequate ventilation wear respiratory protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor.
P320 Specific treatment is urgent (see first aid on this label).
P363 Wash contaminated clothing before use.
P370+P378 In case of fire: Use water spray for extinction.
P391 Collect spillage.
P403+P233 Store in a well-ventilated area. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulations.

**NFPA: 3 Health, 0 Fire, 2 Reactivity Special Hazard Warning: OXIDIZER**
**HMIS: 3 Health, 0 Fire, 2 Reactivity**

# SAFETY DATA SHEET

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Trichloro-s-triazinetrione | 87-90-1 | 99.0 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. If person is not breathing, give artificial respiration, by mouth to mouth if possible. Contact a physician

**Skin Contact:** Take off contaminated clothing. Wash skin thoroughly with soap and water for 15 minutes. Seek medical attention.

**Eye Contact:** Flush eyes with plenty of water for 15 minutes. Seek medical attention.

**Ingestion:** Drink 2 or 3 glasses of water, rinse mouth. Do not give anything to an unconscious person. Do not induce vomiting, unless directed to do so by a doctor. Contact a physician immediately.

**Note to physicians** Probable mucosal damage may contraindicate the use of gastric lavage. Corrosive. Treat symptomatically and supportively.

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Small quantities of water will react with this material which will form nitrogen trichloride, which is violently explosive.

**Unusual Fire or Explosion Hazards:** When heated to decomposition, may release poisonous and corrosive fumes of nitrogen trichloride, chlorine, nitrous oxides, cyanates, carbon monoxide and carbon dioxide.

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Water only. Large amounts of water may be needed and the flow of water should not be stopped until the fire/reaction has stopped.

**Instructions to the Fire Fighters:** Cool containers with water spray. On small fires, use water spray or fog. On large fires, use heavy deluge or fog streams. Flooding amounts of water may be required before extinguishment can be accomplished.

**Fire Fighting Protective Equipment:** Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) in positive pressure mode.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Prevent spillage from contaminating soil or entering waterways, sewers, drains and confined areas. If material is spilled, clean up as soon as possible to prevent contamination with a material with which it will react. Keep spilled material dry. Sweep up and place material in a dry, clean and labeled container.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid skin, eye and clothing contact. Wash hands thoroughly with soap and water after handling.

**Ventilation Requirements:** Local exhaust ventilation.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry and well ventilated area away from incompatible materials.

**Storage Requirements:** Do not store material at temperatures above 60°C/140°F. Available chlorine loss can be as little as 0.1% per year at ambient temperatures. Do not allow water to get into container. Keep containers tightly closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Nitrile or neoprene gloves if skin contact is likely.

**Eye (Specify):** Safety goggles/glasses or face shield if eye contact is likely.

**Respiratory (Specify):** Use NIOSH/MSHA approved dust or vapour mask when airborne exposure limits are exceeded. An approved respirator with an acid gas (for chlorine) and dust prefilter may be adequate.

**Other (Specify):** Body covering clothes and boots. Safety shower and eye wash stations are close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

| | |
|---|---|
| **Physical State:** | **Gas** **Liquid** **Solid** **X** |
| **Odour & Appearance:** | White opaque tablets, chlorine odour |
| **Odour Threshold (ppm):** | Not available |
| **Flammability:** | **Yes** **No** **X** |
| **If Yes, Under Which Conditions?:** | |
| **Auto Ignition Temperature (Celsius):** | Not applicable |
| **Upper Explosion Limit (% By Volume):** | Not applicable |
| **Lower Explosion Limit (% By Volume):** | Not applicable |
| **Decomposition Temp (°C)** | 225°C |
| **Specific Gravity:** | Not applicable |
| **Viscosity:** | Not applicable |
| **Vapour Pressure (mm):** | Not applicable |
| **Vapour Density (Air-1):** | Not applicable |
| **Flashpoint (°C)** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Boiling Point (°C):** | Not applicable |
| **Freezing Point (°C):** | Not applicable |
| **Solubility In Water (20°C):** | Soluble |
| **% Volatile (By Weight)** | Not applicable |
| **PH:** | 2.7 – 3.3 (1% solution) |
| **Coefficient Of Water/Oil Distribution:** | Not applicable |

## SECTION 10 STABILITY AND REACTIVITY

| | |
|---|---|
| **Chemical Stability:** | **Yes** **No** **X** |
| **If No, Under Which Conditions?:** | Stable when dry. Reacts non-violently with water to form a bleach solution. |
| **Incompatibility To Other Substances:** | **Yes** **X** **No** |
| **If So, Which Ones:** | Avoid contact with water on concentrated forms of this material. Avoid contact with easily oxidizable organic materials – ammonia, urea or similar nitrogen containing compounds, inorganic reducing compounds, calcium hypochlorite and alkalis. Also other isocyanurates. |
| **Conditions to Avoid:** | Contamination can cause spontaneous combustion at room temp. |
| **Hazardous Decomposition Products:** | Chlorine gas and traces of phosgene can be liberated at temperatures greater than 225°C. |

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** Irritation or burns to mucous membranes and respiratory tract.

**Skin Contact:** Irritation and may cause burns.

**Eye Contact:** Irritation and may cause burns.

**Ingestion:** Irritation or burns to the gastrointestinal tract.

**CHRONIC HEALTH EFFECTS:** Prolonged exposure may cause damage to the respiratory system. Chronic inhalation exposure may cause impairment of lung function and permanent lung damage.

**Other Health Effects:** Asthma, respiratory and cardiovascular diseases.

**LD 50 of Material (Specify Species and Routes):** 406 mg/kg, Oral (Rat), >2000 mg/kg, Dermal (Rabbit)

**LC 50 of Material (Specify Species and Routes):** 0.09-0.29 mg/l, Inhalation (Rat)

**Exposure (Limits):** Chlorine – TWA: 0.5 ppm, STEL: 1 ppm

**Irritancy of Material** Strong irritant to skin, eye, nose and throat.

**Sensitization of Material** None

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Aquatic toxicity:**

**96 h LC50, Fish** 0.13-0.5 mg/l (Lepomis macrochirus)

**48 h LC50, Daphnia magna** 0.21 mg/l

**Environmental Fate**

**Biodegradability:** Material is subject to hydrolysis. Acids produced by hydrolysis are biodegradable.

**Bioaccumulative Potential:** Not expected to bioaccumulate in the aquatic environment.

**Mobility In Soil:** Expected to be highly mobile in soil.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose of in accordance to all applicable federal, provincial and local laws and

regulations.

**Safe Handling of Residues:** See above

**Disposal of Packaging:** See above

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Trichloroisocyanuric Acid - Dry

**Class:** 5.1

**Label:** Oxidizing substances (5.1)

**Packing Group:** II

**UN:** 2468

1 kg and under are LIMITED QUANTITY

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Trichloroisocyanuric Acid - Dry

**Class:** 5.1

**Label:** Oxidizing substances (5.1)

**Packing Group:** II

**UN:** 2468

**Emergency Guide No. 140**

**IMDG**

**Proper shipping name:** Trichloroisocyanuric Acid - Dry

**Class:** 5.1

**Label:** Oxidizing substances (5.1)

**Packing Group:** II

**UN:** 2468

**EmS No:** F-A, S-Q

**IATA/ICAO**

**Proper shipping name:** Trichloroisocyanuric Acid - Dry

**Class:** 5.1

**Label:** Oxidizing substances (5.1)

**Packing Group:** II

**UN:** 2468

**ERG No:** 5L

For shipments by vessel or bulk quantities (>882 pounds) by motor vehicle or aircraft, add “Marine Pollutant (Trichloroisocyanuric Acid)” to shipping description and label containers with Marine Pollutant markings.

## SECTION 15 REGULATORY INFORMATION

**CANADA** Listed in DSL

**WHMIS**: C, D1B, and D2B

**USA** Reported in the EPA TSCA Inventory.

**EPA Registration No.** 83936-3

**Emergency overview in accordance to EPA Master Label:**

Danger. Hazards to humans and domestic animals. Highly corrosive. Causes irreversible damage or skin burns. May be fatal if inhaled, or absorbed through skin. Strong oxidizing agent. This pesticide is toxic to fish and aquatic organisms.

**SARA (311,312)** This product is categorized as an immediate health hazard, and fire and reactivity physical hazard.

**Massachusetts, New Jersey and Pennsylvania Right to Know Lists:** Listed

**INTERNATIONAL**

**Australia, China, and Korea:** Listed on their chemical inventory lists.

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **May 10, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**NON-CHLORINESHOCK** **WHMIS:** E

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Oxone
**Chemical Family:** Monopersulphate
**Chemical Formula:** $2KHSO_5$ $KHSO_4$ $K_2SO_4$
**Trade Name & Synonyms:** Potassium Monopersulphate
**Molecular Weight:** Not Applicable
**Material Use**: Pool Water Treatment Chemical

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** Acute toxicity, Oral, Category 4
Skin corrosion/irritation, Category 1B
Serious eye damage/eye irritation, Category 1

**Symbol(s)**

**Signal Word** Danger

**Hazard statements:** H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

**Precautionary statements:** P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulations.

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Pentapotassium bis(peroxymonosulphate) bis(sulphate) | 70693-62-8 | 60 - 100 |
| Dipotassium peroxodisulphate | 7727-21-1 | 1 - 5 |
| Tetra(carbonato(2-))dihydroxypentamagnesium | 7760-50-1 | 0.5 – 1.5 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. Give artificial respiration if required. Seek medical attention.
**Skin Contact:** Wash thoroughly with soap and water. Flush with water for 15 minutes.
**Eye Contact:** Flush eyes with plenty of water for 15 minutes. Seek medical attention
**Ingestion:** Do not induce vomiting. Drink large quantities of water and contact a physician.
**Note to physicians:** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Oxygen, Sulphur dioxide, and Sulphur trioxide.
**Unusual Fire or Explosion Hazards:** None
**Sensitivity to Mechanical Impact**: None
**Rate of Burning:** None
**Explosive Power:** None
**Sensitivity to Static Discharge:** None
**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** Wear self-contained breathing apparatus and protective suit.

**Fire Fighting Protective Equipment:** See above

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Sweep up and collect in a metal container. Flush residue with water. Large quantities should be neutralized with soda ash.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid contact with eyes, skin and clothing. Avoid breathing dust. Wash thoroughly after handling.

**Ventilation Requirements:** Use in a well ventilated area.

**Other Precautions:** Keep away from heat and flame.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Do not mix directly with other chemicals. Do not store with combustible materials. Never allow product to get in contact with water during storage.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** NIOSH/MSHA air purifying respirator if prolonged use in non-ventilated area is Unavoidable.

**Other (Specify):** Impervious clothing is contact is likely. Eye wash stations are close to product use.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **Solid** **X**

**Odour & Appearance:** White granular, opaque, odourless

| | |
|---|---|
| **Odour Threshold (ppm):** | Not applicable |
| **Flammability:** | **Yes** **No** **X** |
| **If Yes, Under Which Conditions?:** | |
| **Auto Ignition Temperature (Celsius):** | Not applicable |
| **Upper Explosion Limit (% By Volume):** | Not applicable |
| **Lower Explosion Limit (% By Volume):** | Not applicable |
| **Decomposition Temp (°C)** | Not applicable |
| **Specific Gravity:** | 1.532 |
| **Viscosity:** | Not applicable |
| **Vapour Pressure (mm):** | Not applicable |
| **Vapour Density (Air-1):** | Not applicable |
| **Flashpoint (°C)** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Boiling Point (°C):** | Not applicable |
| **Freezing Point (°C):** | Decomposes |
| **Solubility In Water (20°C):** | 25.6% @ 20°C |
| **% Volatile (By Weight)** | Not applicable |
| **PH:** | 2.8 – 4.0 (1% solution) |
| **Coefficient Of Water/Oil Distribution:** | Not applicable |

## SECTION 10 STABILITY AND REACTIVITY

| | |
|---|---|
| **Chemical Stability:** | **Yes** **X** **No** |
| **If No, Under Which Conditions?:** | |
| **Incompatibility To Other Substances:** | **Yes** **X** **No** |
| **If So, Which Ones:** | This product is an oxidizer. When mixed with halides (chlorine, bromine) or compounds containing halides, it will release the respective halogen gas. Examples: Mixture of this product and salt will emit chlorine gas. Mixture with cyanides can release hydrogen cyanide gas. Heavy metal salts such as cobalt, nickel and copper cause the evolution of oxygen. |
| **Conditions to Avoid:** | Avoid extreme heat. Temperature > 50°C (> 122°F) |
| **Hazardous Decomposition Products:** | Oxygen, Sulphur dioxide and Sulphur trioxide. |

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** May cause irritation of respiratory tract.

**Skin Contact:** Severe skin irritation and burns.

**Eye Contact:** Corrosive, may cause permanent eye injury.

**Ingestion:** Harmful if swallowed.

**CHRONIC HEALTH EFFECTS** None known

**Other Health Effects:** None known

**LD 50 of Material (Specify Species and Routes)**

Pentapotassium bis(peroxymonosulphate) bis(sulphate): 500 mg/kg, Oral (Rat), > 2000 mg/kg, Dermal (Rat).

Dipotassium peroxodisulphate: 1130 mg/kg, Oral (Rat), > 10000 mg/kg, Dermal (Rabbit)

Tetra(carbonato(2-))dihydroxypentamagnesium: >2000 mg/kg, Oral (Rat).

**LC 50 of Material (Specify Species and Routes)**

Pentapotassium bis(peroxymonosulphate) bis(sulphate): > 5 mg/l, Inhalation 4h (Rat)

Dipotassium peroxodisulphate: >10.7 mg/l, Inhalation 4h (Rat)

**Exposure (Limits):** Pentapotassium bis(peroxymonosulphate) bis(sulphate): No data available

Dipotassium peroxodisulphate: TLV (ACGIH) 0.1mg/m3, TWA as persulfate

**Irritancy of Material** Skin, eye, nose and throat.

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity:**

**AQUATIC TOXICITY**

**Pentapotassium bis(peroxymonosulphate) bis(sulphate):**

Cyprinodon variegatus (sheepshead minnow) 1.09 mg/l: 96 h LC50

Selenastrum capricornutum (green algae) > 1 mg/l: 96 h ErC50

Selenastrum capricornutum (green algae) 0.5 mg/l: 72 h NOEC

Daphnia 3.5 mg/l: 48 h EC50

Cyprinodon variegatus (sheepshead minnow) 0.222 mg/l: 37 d NOEC

Americamysis bahia (mysid shrimp) 0.267 mg/l: 28 d NOEC

**Dipotassium peroxodisulphate:**

Oncorhynchus mykiss (rainbow trout) 76.3 mg/l: 96 h LC50

Pseudokirchneriella subcapitata (green algae) 83.7 mg/l: 72 h EbC50

Pseudokirchneriella subcapitata (green algae) 39.2 mg/l: 72 h NOEC

Daphnia magna (water flea) 120 mg/l: 48 h EC50

**ENVIRONMENTAL FATE**

**Pentapotassium bis(peroxymonosulphate) bis(sulphate):**

Biodegradability: Readily biodegradable.

Bioaccumulation: Not applicable

Mobility in Soil: Not applicable

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose material in accordance with federal, provincial and local government regulations.

**Safe Handling of Residues:** Flush residue with water.

**Disposal of Packaging:** Dispose packaging in accordance with federal, provincial and local government regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)

Class: 8

Packing group: II

UN number: 3260

Limited Quantity is 1kg and under.

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)

Class: 8

Packing group: II

UN number: 3260

**IATA_C**

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)

Class: 8

Packing group: II

UN number: 3260

**IMDG**

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)

Class: 8

Packing group: II

UN number: 3260

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: E

**USA**

**TSCA:** On the inventory, or in compliance with the inventory.

**SARA 313 Regulated Chemicals:** Sara 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

**California Prop. 65:** Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known.

**NJ Right to Know Regulated Chemical(s):** Substances on the New Jersey Workplace Hazardous Substances List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Dipotassium peroxodisulphate.

**PA Right to Know Regulated Chemical(s):** Substances on the Pennsylvania Hazardous Substances List present at a Concentration of 1% or more (0.01% for Special Hazardous Substances): Dipotassium peroxodisulphate.

# SAFETY DATA SHEET

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **November 23, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

**While Capo Industries Ltd. believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Capo Industries Ltd. assumes legal responsibility. They are offered solely for your consideration and verification. Any use of this data and information must be determined by the user to be in accordance with applicable Federal, Provincial and local laws and regulations.**

# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**OXIDIZER** **WHMIS:** E

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Oxone

**Chemical Family:** Monopersulphate

**Chemical Formula:** $2KHSO_5$ $KHSO_4$ $K_2SO_4$

**Trade Name & Synonyms:** Potassium Monopersulphate

**Molecular Weight:** Not Applicable

**Material Use**: Pool Water Treatment Chemical

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** Acute toxicity, Oral, Category 4
Skin corrosion/irritation, Category 1B
Serious eye damage/eye irritation, Category 1

**Symbol(s)**

**Signal Word** Danger

**Hazard statements:** H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

**Precautionary statements:** P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulations.

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Pentapotassium bis(peroxymonosulphate) bis(sulphate) | 70693-62-8 | 60 - 100 |
| Dipotassium peroxodisulphate | 7727-21-1 | 1 - 5 |
| Tetra(carbonato(2-))dihydroxypentamagnesium | 7760-50-1 | 0.5 – 1.5 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. Give artificial respiration if required. Seek medical attention.
**Skin Contact:** Wash thoroughly with soap and water. Flush with water for 15 minutes.
**Eye Contact:** Flush eyes with plenty of water for 15 minutes. Seek medical attention
**Ingestion:** Do not induce vomiting. Drink large quantities of water and contact a physician.
**Note to physicians:** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Oxygen, Sulphur dioxide, and Sulphur trioxide.
**Unusual Fire or Explosion Hazards:** None
**Sensitivity to Mechanical Impact**: None
**Rate of Burning:** None
**Explosive Power:** None
**Sensitivity to Static Discharge:** None
**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** Wear self-contained breathing apparatus and protective suit.

**Fire Fighting Protective Equipment:** See above

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Sweep up and collect in a metal container. Flush residue with water. Large quantities should be neutralized with soda ash.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid contact with eyes, skin and clothing. Avoid breathing dust. Wash thoroughly after handling.

**Ventilation Requirements:** Use in a well ventilated area.

**Other Precautions:** Keep away from heat and flame.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Do not mix directly with other chemicals. Do not store with combustible materials. Never allow product to get in contact with water during storage.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** NIOSH/MSHA air purifying respirator if prolonged use in non-ventilated area is Unavoidable.

**Other (Specify):** Impervious clothing is contact is likely. Eye wash stations are close to product use.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **Solid** **X**

**Odour & Appearance:** White granular, opaque, odourless

| | |
|---|---|
| **Odour Threshold (ppm):** | Not applicable |
| **Flammability:** | **Yes** **No** **X** |
| **If Yes, Under Which Conditions?:** | |
| **Auto Ignition Temperature (Celsius):** | Not applicable |
| **Upper Explosion Limit (% By Volume):** | Not applicable |
| **Lower Explosion Limit (% By Volume):** | Not applicable |
| **Decomposition Temp (°C)** | Not applicable |
| **Specific Gravity:** | 1.532 |
| **Viscosity:** | Not applicable |
| **Vapour Pressure (mm):** | Not applicable |
| **Vapour Density (Air-1):** | Not applicable |
| **Flashpoint (°C)** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Boiling Point (°C):** | Not applicable |
| **Freezing Point (°C):** | Decomposes |
| **Solubility In Water (20°C):** | 25.6% @ 20°C |
| **% Volatile (By Weight)** | Not applicable |
| **PH:** | 2.8 – 4.0 (1% solution) |
| **Coefficient Of Water/Oil Distribution:** | Not applicable |

## SECTION 10 STABILITY AND REACTIVITY

| | |
|---|---|
| **Chemical Stability:** | **Yes** **X** **No** |
| **If No, Under Which Conditions?:** | |
| **Incompatibility To Other Substances:** | **Yes** **X** **No** |
| **If So, Which Ones:** | This product is an oxidizer. When mixed with halides (chlorine, bromine) or compounds containing halides, it will release the respective halogen gas. Examples: Mixture of this product and salt will emit chlorine gas. Mixture with cyanides can release hydrogen cyanide gas. Heavy metal salts such as cobalt, nickel and copper cause the evolution of oxygen. |
| **Conditions to Avoid:** | Avoid extreme heat. Temperature > 50°C (> 122°F) |
| **Hazardous Decomposition Products:** | Oxygen, Sulphur dioxide and Sulphur trioxide. |

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** May cause irritation of respiratory tract.

**Skin Contact:** Severe skin irritation and burns.

**Eye Contact:** Corrosive, may cause permanent eye injury.

**Ingestion:** Harmful if swallowed.

**CHRONIC HEALTH EFFECTS** None known

**Other Health Effects:** None known

**LD 50 of Material (Specify Species and Routes)**

Pentapotassium bis(peroxymonosulphate) bis(sulphate): 500 mg/kg, Oral (Rat), > 2000 mg/kg, Dermal (Rat).

Dipotassium peroxodisulphate: 1130 mg/kg, Oral (Rat), > 10000 mg/kg, Dermal (Rabbit)

Tetra(carbonato(2-))dihydroxypentamagnesium: >2000 mg/kg, Oral (Rat).

**LC 50 of Material (Specify Species and Routes)**

Pentapotassium bis(peroxymonosulphate) bis(sulphate): > 5 mg/l, Inhalation 4h (Rat)

Dipotassium peroxodisulphate: >10.7 mg/l, Inhalation 4h (Rat)

**Exposure (Limits):** Pentapotassium bis(peroxymonosulphate) bis(sulphate): No data available

Dipotassium peroxodisulphate: TLV (ACGIH) 0.1mg/m3, TWA as persulfate

**Irritancy of Material** Skin, eye, nose and throat.

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity:**

**AQUATIC TOXICITY**

**Pentapotassium bis(peroxymonosulphate) bis(sulphate):**

Cyprinodon variegatus (sheepshead minnow) 1.09 mg/l: 96 h LC50

Selenastrum capricornutum (green algae) > 1 mg/l: 96 h ErC50

Selenastrum capricornutum (green algae) 0.5 mg/l: 72 h NOEC

Daphnia 3.5 mg/l: 48 h EC50

Cyprinodon variegatus (sheepshead minnow) 0.222 mg/l: 37 d NOEC

Americamysis bahia (mysid shrimp) 0.267 mg/l: 28 d NOEC

**Dipotassium peroxodisulphate:**

Oncorhynchus mykiss (rainbow trout) 76.3 mg/l: 96 h LC50

Pseudokirchneriella subcapitata (green algae) 83.7 mg/l: 72 h EbC50

Pseudokirchneriella subcapitata (green algae) 39.2 mg/l: 72 h NOEC

Daphnia magna (water flea) 120 mg/l: 48 h EC50

**ENVIRONMENTAL FATE**

**Pentapotassium bis(peroxymonosulphate) bis(sulphate):**

Biodegradability: Readily biodegradable.

Bioaccumulation: Not applicable

Mobility in Soil: Not applicable

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose material in accordance with federal, provincial and local government regulations.

**Safe Handling of Residues:** Flush residue with water.

**Disposal of Packaging:** Dispose packaging in accordance with federal, provincial and local government regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)

Class: 8

Packing group: II

UN number: 3260

Limited Quantity is 1kg and under.

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)

Class: 8

Packing group: II

UN number: 3260

**IATA_C**

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)

Class: 8

Packing group: II

UN number: 3260

**IMDG**

Proper shipping name: Corrosive Solid Acidic – Inorganic N.O.S. (Monopersulphate Compound)

Class: 8

Packing group: II

UN number: 3260

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: E

**USA**

**TSCA:** On the inventory, or in compliance with the inventory.

**SARA 313 Regulated Chemicals:** Sara 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.

**California Prop. 65:** Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known.

**NJ Right to Know Regulated Chemical(s):** Substances on the New Jersey Workplace Hazardous Substances List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Dipotassium peroxodisulphate.

**PA Right to Know Regulated Chemical(s):** Substances on the Pennsylvania Hazardous Substances List present at a Concentration of 1% or more (0.01% for Special Hazardous Substances): Dipotassium peroxodisulphate.

# SAFETY DATA SHEET

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **November 23, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**PH Down / PH Reducer** **WHMIS:** E

**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

**Chemical Name:** Sodium Bisulphate
**Chemical Family:** Sodium Salt
**Chemical Formula:** Na HSO4
**Trade Name & Synonyms:** Not applicable
**Molecular Weight:** Not applicable
**Material Use**: Pool water pH reducer

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** Serious eye damage/eye irritation, Category 1

**Symbol(s)**

**Signal Word** Danger

**Hazard statements** H318 Causes serious eye damage.

**Precautionary statements** P280 Wear protective gloves/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor.

# SAFETY DATA SHEET

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Sodium Bisulphate | 7681-38-1 | 60 – 100 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. If irritation persists, contact a physician.

**Skin Contact:** Wash thoroughly with soap and water. If irritation persists, contact a physician.

**Eye Contact:** Flush eyes with plenty of water for 15 minutes. Seek prompt medical attention.

**Ingestion:** Drink 2 or 3 glasses of water followed by milk of magnesia, beaten eggs or vegetable oil. Contact a physician immediately. Do not induce vomiting. If spontaneous vomiting occurs, keep head below victims knees to prevent breathing in of vomitus.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** $SO_2$ and $SO_3$ at temperatures above 299°C

**Unusual Fire or Explosion Hazards:** None

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use appropriate media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** Wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Fire Fighting Protective Equipment:** See above.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Stop leak if without risk. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Sweep up material and neutralize with an alkaline solution. Place in a designated labeled waste container.

# SAFETY DATA SHEET

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Put on appropriate protective equipment. Avoid breathing dusts. Wash thoroughly after handling.

**Ventilation Requirements:** Use in well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Keep container tightly closed. Material is hygroscopic and will readily absorb moisture. Do not store dry product where exposed to moist conditions.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Use in a well ventilated area.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves is skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** Wear appropriate dust mask if prolonged use in non-ventilated area is unavoidable.

**Other (Specify):** Impervious clothing if contact is likely. Eye wash stations close to chemical use.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **Solid** **X**

**Odour & Appearance:** Opaque white beads, acidic odour

**Odour Threshold (ppm):** Not applicable

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Not applicable

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

**Decomposition Temp (°C)** Not applicable

**Specific Gravity:** 1.28

**Viscosity:** Not applicable

**Vapour Pressure (mm):** Not applicable

| | |
|---|---|
| **Vapour Density (Air-1):** | Not applicable |
| **Flashpoint (°C)** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Boiling Point (°C):** | Not applicable |
| **Freezing Point (°C):** | 176.7°C |
| **Solubility In Water (20°C):** | Soluble |
| **% Volatile (By Weight)** | Not applicable |
| **PH:** | 1.4 (1% solution) |
| **Coefficient Of Water/Oil Distribution:** | Not applicable |

## SECTION 10 STABILITY AND REACTIVITY

| | | | |
|---|---|---|---|
| **Chemical Stability:** | **Yes** | **X** | **No** |
| **If No, Under Which Conditions?:** | | | |
| **Incompatibility To Other Substances:** | **Yes** | **X** | **No** |
| **If So, Which Ones:** | Strong alkaline, acids, water, sodium hypochlorite solution and oxidizers | | |
| **Conditions to Avoid:** | Do not mix dry or concentrated solutions of this product with concentrated solutions of chlorine bleach, ammonia cleansers or similar products. | | |
| **Hazardous Decomposition Products:** | If heated above 299°C; $SO_2$ and $SO_3$ will form. | | |

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** Dust may cause burns to mucous membranes and respiratory tract.

**Skin Contact:** Mild irritant

**Eye Contact:** Causes serious eye irritation and may cause burns.

**Ingestion:** If swallowed, may cause burns in the mouth, esophagus and stomach.

**CHRONIC HEALTH EFFECTS:** Repeated exposure without proper hygiene may cause skin rashes.

**Other Health Effects:** None

**LD 50 of Material (Specify Species and Routes)** Oral, Rat 2800 mg/kg

**LC 50 of Material (Specify Species and Routes)** Not available

**Exposure (Limits):** Not established

**Irritancy of Material** Skin, eye, nose and throat irritant

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity** This product readily dissolves in water to form a weak acid solution. A 0.05% or greater (by weight) solution of this product will likely be acutely harmful to aquatic life.

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**Environmental Fate**

**Biodegradability:** Not available

**Biaccumulative Potential:** Not available

**Mobility In Soil:** Not available

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** After neutralizing with an alkaline solution, dispose in accordance with Federal, Provincial local regulations.

**Safe Handling of Residues:** Flush with plenty of wate**r.**

**Disposal of Packaging:** Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:** Not regulated

**US DOT CLASSIFICATION (49CFR 172.101, 172.102):** Not regulated

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: E

**NPRI:** None of the components are listed.

**CEPA:** None of the components are listed.

**Canada Inventory:** All components are listed or exempted.

**USA**

**U.S. Inventory (TSCA 8b):** All components are listed or exempted.

**SARA 302/304 emergency planning and notification:** No products were found.

**SARA 311/312 MSDS distribution – chemical inventory – hazard identification:** Sodium bisulphate: Acute health hazard

**State Regulations:** None of the products are listed.

**California Prop. 65:** No products were found.

**INTERNATIONAL**

**Australia, China, Europe, Japan, Malaysia, Korea, New Zealand, and Philipines:** All components are listed or exempted.

**Taiwan:** Not determined.

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **May 5, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**PH Up / PH Booster / PH Plus** **WHMIS:** D2B

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Sodium Carbonate
**Chemical Family:** Sodium Salt
**Chemical Formula:** Na2 CO3
**Trade Name & Synonyms:** Soda Ash
**Molecular Weight:** Not applicable
**Material Use**: Pool chemical to boost pH

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 2A

**Symbol(s)**

**Signal Word** Warning

**Hazard statements** H315 Causes skin irritation.
H319 Causes serious eye irritation.

**Precautionary statements** P264 Wash hands thoroughly after handling.
P280 Wear protective clothes/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P362+P364 Take off all contaminated clothing and wash it before reuse.

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Sodium Carbonate | 497-19-8 | 60 - 100 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. Obtain medical attention. Administer artificial respiration or CPR as required.

**Skin Contact:** Wash thoroughly with soap and water.

**Eye Contact:** Flush eyes with plenty of water for 15 minutes. Seek medical attention.

**Ingestion:** Drink 2 or 3 glasses of milk. Contact a physician immediately.

**Note to physicians** Treat symptomatically. Medical conditions that may be aggravated by exposure to this product include diseases of the skin, eyes and respiratory tract.

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** None in normal use.

**Unusual Fire or Explosion Hazards:** None

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** None

**Explosive Power:** None

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Carbon dioxide, dry chemical, alcohol foam, water fog, dry sand..

**Instructions to the Fire Fighters:** Isolate materials that are not involved in the fire and protect personnel. Use water spray to cool fire exposed containers or structures. Use water to disperse vapours. Spilled material may cause floors and contact surfaces to become slippery.

**Fire Fighting Protective Equipment:** Use self-contained breathing apparatus and protective clothing.

# SAFETY DATA SHEET

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Neutralize with a weak acid to a pH of 6 to 9. Sweep up material and place in a labeled container for disposal.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Use normal industrial hygiene and housekeeping practices. In the presence of moisture, soda ash and lime dusts combine to form corrosive caustic soda which may cause burns.

**Ventilation Requirements:** Use in a well ventilated area.

**Other Precautions:** Avoid breathing dusts. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Wash contaminated clothing before reuse.

**STORAGE**

**Ventilation Requirements:** Ventilation should be corrosion proof. Store in a cool, dry area.

**Storage Requirements:** Keep away from heat, sparks or flames. Keep containers closed. Avoid moisture contamination. Prolonged storage may result in lumping or caking. Product should not be stored in aluminum, lead or tin. Attacks some types of rubber, plastics and coatings. Confirm suitability of any packaging before using.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation. Ventilation should be corrosion and explosion proof. Make up air should be supplied to balance air that is removed by local exhaust ventilation.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** Wear dust mask if prolonged use in a non-ventilated area is unavoidable.

**Other (Specify):** Wear protective clothing if contact is likely. Eye wash stations are close to work area.

# SAFETY DATA SHEET

## SECTION 9 PHYSICAL DATA FOR MATERIAL

| | | | | | |
|---|---|---|---|---|---|
| **Physical State:** | **Gas** | | **Liquid** | **Solid** | **X** |
| **Odour & Appearance:** | White granular solid, odourless | | | | |
| **Odour Threshold (ppm):** | Not applicable | | | | |
| **Flammability:** | | **Yes** | | **No** | **X** |
| **If Yes, Under Which Conditions?:** | | | | | |
| **Auto Ignition Temperature (Celsius):** | Not applicable | | | | |
| **Upper Explosion Limit (% By Volume):** | Not applicable | | | | |
| **Lower Explosion Limit (% By Volume):** | Not applicable | | | | |
| **Decomposition Temp (°C)** | 400°C | | | | |
| **Specific Gravity:** | 2.532 | | | | |
| **Viscosity:** | Not applicable | | | | |
| **Vapour Pressure (mm):** | Not applicable | | | | |
| **Vapour Density (Air-1):** | Not applicable | | | | |
| **Flashpoint (°C)** | Not applicable | | | | |
| **Evaporation Rate** | Not applicable | | | | |
| **Boiling Point (°C):** | Not applicable | | | | |
| **Freezing Point (°C):** | Not applicable | | | | |
| **Solubility In Water (20°C):** | 17.5% by weight | | | | |
| **% Volatile (By Weight)** | Not applicable | | | | |
| **PH:** | 11.3 (1% solution) | | | | |
| **Coefficient Of Water/Oil Distribution:** | Not applicable | | | | |

## SECTION 10 STABILITY AND REACTIVITY

| | | | |
|---|---|---|---|
| **Chemical Stability:** | **Yes** | **X** | **No** |
| **If No, Under Which Conditions?:** | | | |
| **Incompatibility To Other Substances:** | **Yes** | **X** | **No** |
| **If So, Which Ones:** | Acids, lime dust, heat. | | |
| **Conditions to Avoid:** | May react with acids causing carbon dioxide evolution and severe splattering. Contact with lime dust in the presence of moisture can produce sodium hydroxide. | | |
| **Hazardous Decomposition Products:** | Carbon dioxide when burned. | | |

# SAFETY DATA SHEET

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** Dust may cause irritation to throat and nose, and respiratory tract.

**Skin Contact:** Skin contact may cause irritation.

**Eye Contact:** Eye contact may cause irritation and burns.

**Ingestion:** Severe gastrointestinal irritation, nausea, vomiting and diarrhea.

**CHRONIC HEALTH EFFECTS:** May lead to irritation and/or sensitivity of the skin.

**Other Health Effects:** Skin irritation may be aggravated in persons with existing skin lesions. Breathing of dust may Aggravate acute or chronic asthma and other pulmonary diseases.

**LD 50 of Material (Specify Species and Routes)** 4090 mg/kg, Oral (Rat), >2000 mg/kg,

**LC 50 of Material (Specify Species and Routes)** 2.3 mg/l, Inhalation, 2 h (Rat)

**Exposure (Limits:** Not available

**Irritancy of Material** Skin, eyes, nose and throat irritant.

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity**

Daphnia Magnia LC50, 96hr: 265-565mg/l

Blue Gill Sunfish LC50, 96hr: 300-320mg/l

Daphnia Magnia EC50, 48hr: 1200mg/l

**Environmental Fate**

**Biodegradability:** Not applicable

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Considerable solubility and mobility. Soil/sediments.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Deactivating Chemicals:** Neutralize with a weak acid to a pH of 6 to 9.

**Waste Disposal:** Dispose absorbed material at an approved landfill site in accordance with Federal, Provincial and local regulations.

**Safe Handling of Residues:** See above

**Disposal of Packaging:** Dispose absorbed material at an approved landfill site in accordance with Federal, Provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:** Not Regulated

**US DOT CLASSIFICATION (49CFR 172.101, 172.102):** Not Regulated

## SECTION 15 REGULATORY INFORMATION

**WHMIS**: D2B,

**HPR COMPLIANCE:** This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **May 5, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Pool Water Stabilizer** **WHMIS:** Non Controlled

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Cyanuric Acid
**Chemical Family:** Organic acid
**Chemical Formula:** $C_3 H_3 N_3 O_3$
**Trade Name & Synonyms:** Not available
**Molecular Weight:** 129.07
**Material Use**: Pool water stabilizer

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** None
**Symbol(s)** None
**Signal Word** None
**Hazard statements** None
**Precautionary statements** None

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|

No Regulated Components

## SECTION 4 FIRST AID MEASURES

**Inhalation:** No effects expected. If adverse effects occur, remove person to fresh air. If symptoms of overexposure occur, get medical attention.

**Skin Contact:** Wash hands thoroughly with soap and water. If irritation persists, get medical attention.

**Eye Contact:** Solids should be removed. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs, get medical attention.

**Ingestion:** No effects expected. If large amounts are ingested, get medical attention.

**Note to physicians:** This material causes mild irritation to skin and eyes. Removing the material via irrigation is usually sufficient. There is no anecdote. Cyanuric acid is readily removed from the body via the renal system, and is not bioaccumulated. Treatment is supportive care.

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Cyanic acid, ammonia, oxides of carbon and oxides of nitrogen.
**Unusual Fire or Explosion Hazards:** Not applicable
**Sensitivity to Mechanical Impact**: None
**Rate of Burning:** Not applicable
**Explosive Power:** Not applicable
**Sensitivity to Static Discharge:** None
**Fire Extinguishing Media:** Use extinguishing agents appropriate for surrounding fire.
**Instructions to the Fire Fighters:** Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.
**Fire Fighting Protective Equipment:** Wear NIOSH approved positive-pressure self-contained breathing apparatus in pressure demand mode.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Avoid contact with eyes. Avoid generating dust. When handling this material, wear appropriate personal protective equipment. Sweep up material and place in a clean, labelled container and seal. Keep out of water supplies and sewers.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid generating dust. Wash hands thoroughly after handling. Wear personal protective equipment.
**Ventilation Requirements:** Local exhaust ventilation.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry place.
**Storage Requirements:** Keep separated from incompatible substances. Keep container closed when not in use.

# SAFETY DATA SHEET

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Use in a well ventilated area.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Butyl rubber, natural rubber, neoprene, nitrile or PVC gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** Wear NIOSH approved dust respirator.

**Other (Specify):** Eye wash and shower stations are close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **Solid** **X**

**Odour & Appearance:** Mild odour, white, granular, free flowing

**Odour Threshold (ppm):** Not applicable

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Not applicable

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

**Decomposition Temp (°C)** 350 – 360$^{o}$C (662 – 680$^{o}$F)

**Specific Gravity:** 1.77

**Viscosity:** Not applicable

**Vapour Pressure :** 0.000001 Pa@25$^{o}$C

**Vapour Density (Air-1):** Not applicable

**Flashpoint (°C)** Not applicable

**Evaporation Rate** Not applicable

**Boiling Point (°C):** Not applicable

**Freezing Point (°C):** Not applicable

**Solubility In Water (20°C):** 0.20 g/100 g water @ 25°C

**% Volatile (By Weight)** Not applicable

**PH:** Not available

**Coefficient Of Water/Oil Distribution:** Not applicable

## SECTION 10 STABILITY AND REACTIVITY

| | | | |
|---|---|---|---|
| **Chemical Stability:** | **Yes** | **X** | **No** |
| **If No, Under Which Conditions?:** | | | |
| **Incompatibility To Other Substances:** | **Yes** | **X** | **No** |
| **If So, Which Ones:** | Oxidizing agents. | | |
| **Conditions to Avoid:** | None known | | |
| **Hazardous Decomposition Products:** | Cyanic acid, ammonia, oxides of carbon and oxides of nitrogen. | | |

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** None expected. Inhalation of powder or fine particulates may cause irritation, cough.

**Skin Contact:** May cause slight skin irritation.

**Eye Contact:** May cause mild eye irritation.

**Ingestion:** No known effects.

**CHRONIC HEALTH EFFECTS:** None

**Other Health Effects:** May aggravate pre-existing conditions such as: eye disorders that decrease tear production or have reduced integrity of the eye; skin disorders that compromise the integrity of the skin; and respiratory conditions including asthma and other breathing disorders.

**LD 50 of Material (Specify Species and Routes):** 3400 mg/kg, Oral (Mouse), 7700 mg/kg, Oral (Rat), >5 g/kg, Dermal (Rabbit)

**LC 50 of Material (Specify Species and Routes):** >5.25 mg/l, Inhalation 4h (Rat)

**Exposure (Limits):** Not available

**Irritancy of Material** Mild skin and eye irritant.

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity**

**Aquatic Toxicity**

This material is believed to be practically non-toxic to aquatic life.

**Fish Toxicity**

LC50 Bluegill sunfish: >1000 mg/l (96 hour)

LC50 Rainbow trout: >2100 mg/l (96 hour)

LC50 Fathead minnow: >2100 mg/l (96 hour)

LC50 Inland silversides: >8000 mg/l (96 hour)

**Invertebrate Toxicity**

LC50 Water flea: >1000 mg/l (48 hour)

LC50 Mysid shrimp: 4438 mg/l (96 hour)

**Algae Toxicity**

EC50 Green algae: 655 – 712 mg/l (96 hour)

EC50 Navicula pelliculosa: >3780 mg/l (96 hour)

**Environmental Fate**

**Biodegradability:** Cyanuric acid biodegrades readily under a wide variety of natural conditions, and particularly well in systems of either low or zero dissolved-oxygen levels.

**Bioaccumulative Potential:** Not expected to bioaccumulate.

**Mobility In Soil:** Cyanuric acid will have a high soil mobility based on KOC values ranging from 66 to 124.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Reuse or recycle if possible. Dispose of material in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** See above.

**Disposal of Packaging:** Dispose of container in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

Not regulated

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

Not regulated

# SAFETY DATA SHEET

## SECTION 15 REGULATORY INFORMATION

**CANADA** Listed on DSL and Canada's Ingredient Disclosure List.

**WHMIS**: Not regulated.

**USA** Listed on the TSCA inventory.

**INTERNATIONAL** Not available

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **January 1, 1996**
**Date Revised:** **December 2, 2018**
**Additional Notes Or References:**

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# MATERIAL SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Scale & Stain** **WHMIS:** D2B

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Not applicable
**Chemical Family:** Not applicable
**Chemical Formula:** Not applicable
**Trade Name & Synonyms:** Not applicable
**Molecular Weight:** Not applicable
**Material Use**: Chelating agent

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** H316 Skin corrosion/irritation, Category 3
H319 Serious eye damage/ eye irritation, Category 2A
H335 Specific target organ toxicity, Single exposure, Respiratory tract irritation, Category 3

**Symbol(s)**

**Signal Word** Warning

**Hazard statements** Causes mild skin irritation and serious eye irritation. May cause respiratory tract irritation.

**Precautionary statements** Avoid skin and eye contact. Wear gloves and safety glasses when handling. Wash hands thoroughly after use. If eye contact, flush eyes with copious amounts of water for 15 minutes. Avoid breathing in mists/fumes/vapours. If inhaled, remove person to fresh air and seek medical attention.

# MATERIAL SAFETY DATA SHEET

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Sodium Salt of 1 Hydroxyethylidene-1.1-Diphosphonic Acid | 29329-71-3 | 3 - 7 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** If mists are inhaled, remove to fresh air and seek medical attention

**Skin Contact:** Wash hands thoroughly with soap and water for 15 minutes.

**Eye Contact:** Flush eyes with copious amounts of water for 15 minutes. Seek medical attention if irritation persists.

**Ingestion:** Do not induce vomiting. Drink 2 or 3 glasses of water to dilute material. Contact a physician immediately.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Oxides of carbon and phosphorus.

**Unusual Fire or Explosion Hazards:** None known

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** Containers exposed to intense heat from fires should be cooled with water to prevent vapour pressure buildup which could result in container rupture. Do not allow runoff to enter waterways.

**Fire Fighting Protective Equipment:** Wear full protective clothing and a self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Prevent entry into sewers, drains, or waterways. Dike if needed. Soak up spill with synthetic or natural absorbent and sweep into a clean, dry and labelled container for disposal.

# MATERIAL SAFETY DATA SHEET

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid skin and eye contact. Wear gloves and safety glasses when handling. Wash hands thoroughly after use. Do not ingest. Avoid inhalation of chemical.

**Ventilation Requirements:** Use in a well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Keep away from acids, peroxides, metals, and easily ignitable materials. Keep containers closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation to keep airborne contaminants below exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** None under normal conditions. Wear a NIOSH approved respirator if there isn't adequate ventilation.

**Other (Specify):** Eye wash and shower stations close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **X** **Solid**

**Odour & Appearance:** Clear blue liquid, mild odour

**Odour Threshold (ppm):** Not applicable

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Not applicable

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

**Decomposition Temp (°C)** Not applicable

**Specific Gravity:** 1.310 – 1.340

**Viscosity:** Not available

**Vapour Pressure (mm):** Not applicable

**Vapour Density (Air-1):** Not applicable

**Flashpoint (°C)** Not applicable

| | |
|---|---|
| **Evaporation Rate** | Not applicable |
| **Boiling Point (°C):** | 100°C |
| **Freezing Point (°C):** | 0°C |
| **Solubility In Water (20°C):** | Soluble |
| **% Volatile (By Weight)** | 56% |
| **PH:** | 4 - 6 |
| **Coefficient Of Water/Oil Distribution:** | Not applicable |

## SECTION 10 STABILITY AND REACTIVITY

| | | | |
|---|---|---|---|
| **Chemical Stability:** | **Yes** | **X** | **No** |
| **If No, Under Which Conditions?:** | | | |
| **Incompatibility To Other Substances:** | **Yes** | **X** | **No** |
| **If So, Which Ones:** | Cyanides | | |
| **Conditions to Avoid:** | High temperatures. | | |
| **Hazardous Decomposition Products:** | CO, CO2, and oxides of phosphorus. | | |

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

| | |
|---|---|
| **Inhalation:** | Severe irritation to respiratory tract if mists are inhaled. |
| **Skin Contact:** | Product may irritate skin. |
| **Eye Contact:** | Strong eye irritant and may cause burns. |
| **Ingestion:** | Gastritis - stomach upset, nausea, and diarrhea. |
| **CHRONIC HEALTH EFFECTS:** | None known |
| **Other Health Effects:** | None known |

**LD 50 of Material (Specify Species and Routes):** 2850 mg/kg, Oral (Rat), >5000 mg/kg, Dermal (Rabbit)

**LC 50 of Material (Specify Species and Routes):** Not available

| | |
|---|---|
| **Exposure (Limits):** | Not established |
| **Irritancy of Material** | Skin, eye and respiratory tract irritant. |
| **Sensitization of Material** | None known |
| **Synergistic Materials** | None known |

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

# MATERIAL SAFETY DATA SHEET

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity** Not available

**Environmental Fate**

**Biodegradability:** Not available

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Not available

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose absorbed materials in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Clean up residual with absorbent material. Place in appropriate container and flush with water.

**Disposal of Packaging:** Dispose containers in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: D2B

**CPR Compliance** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

**USA** Not available

**INTERNATIONAL** Not available

# MATERIAL SAFETY DATA SHEET

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **May 28, 2015**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Spa Enzyme Clear** **WHMIS:** Not Controlled

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Not applicable
**Chemical Family:** Enzyme
**Chemical Formula:** Proprietary blend
**Trade Name & Synonyms:** Not applicable
**Molecular Weight:** Not applicable
**Material Use**: Spa treatment

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** None
**Symbol(s)** None
**Signal Word** None
**Hazard statements** None
**Precautionary statements** None

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| No Regulated Components | | |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Not applicable
**Skin Contact:** Wash thoroughly with soap and water.
**Eye Contact:** Flush eyes with copious amounts of water for 15 minutes. Seek medical attention if irritation persists.
**Ingestion:** None required.
**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Not available
**Unusual Fire or Explosion Hazards:** None known
**Sensitivity to Mechanical Impact**: None
**Rate of Burning:** Not applicable
**Explosive Power:** Not applicable
**Sensitivity to Static Discharge:** None
**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.
**Instructions to the Fire Fighters:** See below
**Fire Fighting Protective Equipment:** Wear full protective clothing and a self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Flush into any sewage of disposal system.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**
**Handling Practices:** None required
**Ventilation Requirements:** None required

**STORAGE**
**Ventilation Requirements:** Store in a cool, dry area.
**Storage Requirements:** Enzymatic activity may be lost if temperatures exceed 50°C, or if pH exposure is below 3.5 or above 9.0.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**
**Engineering Controls:** None required
**PERSONAL PROTECTIVE EQUIPMENT**
**Skin (Specify):** None required
**Eye (Specify):** Safety glasses if eye contact is likely.
**Respiratory (Specify):** None required
**Other (Specify):** None required

# SAFETY DATA SHEET

## SECTION 9 PHYSICAL DATA FOR MATERIAL

| | | | | |
|---|---|---|---|---|
| **Physical State:** | **Gas** | **Liquid** | **X** | **Solid** |
| **Odour & Appearance:** | Odourless, straw coloured liquid. | | | |
| **Odour Threshold (ppm):** | Not applicable | | | |
| **Flammability:** | | **Yes** | **No** | **X** |
| **If Yes, Under Which Conditions?:** | | | | |
| **Auto Ignition Temperature (Celsius):** | Not applicable | | | |
| **Upper Explosion Limit (% By Volume):** | Not applicable | | | |
| **Lower Explosion Limit (% By Volume):** | Not applicable | | | |
| **Decomposition Temp (°C)** | Not available | | | |
| **Specific Gravity:** | 1.002 | | | |
| **Viscosity:** | Not available | | | |
| **Vapour Pressure (mm):** | Not available | | | |
| **Vapour Density (Air-1):** | Not available | | | |
| **Flashpoint (°C)** | Not applicable | | | |
| **Evaporation Rate** | Not available | | | |
| **Boiling Point (°C):** | 100°C | | | |
| **Freezing Point (°C):** | Not available | | | |
| **Solubility In Water (20°C):** | Soluble | | | |
| **% Volatile (By Weight)** | Not available | | | |
| **PH:** | 3.1 | | | |
| **Coefficient Of Water/Oil Distribution:** | Not applicable | | | |

## SECTION 10 STABILITY AND REACTIVITY

| | | | |
|---|---|---|---|
| **Chemical Stability:** | **Yes** | **X** | **No** |
| **If No, Under Which Conditions?:** | | | |
| **Incompatibility To Other Substances:** | **Yes** | **X** | **No** |
| **If So, Which Ones:** | Oxidizing compounds | | |
| **Conditions to Avoid:** | None known | | |
| **Hazardous Decomposition Products:** | Not available | | |

# SAFETY DATA SHEET

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** None expected

**Skin Contact:** None expected

**Eye Contact:** May cause eye irritation.

**Ingestion:** None expected, however excessive ingestion may cause mild nausea.

**CHRONIC HEALTH EFFECTS:** None known

**Other Health Effects:** None expected. All tests show no inhalation, skin or ingestion toxicity.

**LD 50 of Material (Specify Species and Routes):** Not available

**LC 50 of Material (Specify Species and Routes):** Not available

**Exposure (Limits):** Not established

**Irritancy of Material:** Mild eye irritant

**Sensitization of Material:** None known

**Synergistic Materials:** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity** Not available

**Environmental Fate**

**Biodegradability:** Not available

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Not available

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Flush into any sewage or disposal system.

**Safe Handling of Residues:** Flush with plenty of water.

**Disposal of Packaging:** Empty packaging can be recycled if possible, or dispose in accordance with federal, provincial, and local regulations.

# SAFETY DATA SHEET

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: Not Controlled

**USA** Not available

**INTERNATIONAL** Not available

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **January 1, 1996**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# Safety Data Sheet

## Product Identifier

**Manufacturer's Name: CAPO INDUSTRIES LTD.**
**Street Address: 1200 Corporate Drive**
**City: Burlington, Ontario, CANADA**
**Postal Code: L7L 5R6**

**Emergency Telephone: Canutec (613) 996-6666 (Collect) (Transport)**

## SECTION 1. IDENTIFICATION

**Product Identifier** Spa Polish

**Other Means of Identification** Not available

**Recommended Use** Spa Polish

**Restrictions on Use** Not available

**Initial Supplier Identifier** Capo Industries Ltd

**Emergency Telephone Number** (905) 332-6626 (non-Transport)

## SECTION 2. HAZARD IDENTIFICATION

**GHS Classification** Skin irritation, Category 3

**Label Elements** None

**Signal Word** Warning

**Hazard Statement(s):** H316 Causes mild skin irritation.

**Precautionary Statement(s):** P332+P317 If skin irritation occurs: Get medical help

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Concentration % |
|---|---|---|
| Cocoamide DEA (Alternative CAS) | 68603-42-9 | 1 - 5 |
| Glycerin | 56-81-5 | 0.1 – 1.0 |

## SECTION 4. FIRST-AID MEASURES

**Inhalation** Remove person to fresh air. If breathing is difficult seek medical attention.

**Skin Contact**
Wash with soap and water. Remove contaminated clothing and wash it before reuse. If skin irritation occurs, get medical help.

**Eye Contact**
Immediately flush eyes with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical help if irritation persists.

**Ingestion**
Do not induce vomiting. If swallowed, rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

**Most Important Symptoms and Effects, Acute and Delayed**
Causes mild skin irritation. It may irritate respiratory system upon frequent or prolonged use. Ingestion may cause nausea and vomiting.

**Immediate Medical Attention and Special Treatment**
Provide general supportive measures and treat symptomatically.

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media** Dry chemical, $CO_2$, foam or water spray.

**Unsuitable Extinguishing Media** Do not use water jet

**Specific Hazards Arising from the Product** CO, $CO_2$ and $SiO_2$

**Special Protective Equipment and Precautions for Fire-Fighters**
Wear full protective clothing and a self-contained breathing apparatus. Use water spray to cool fire exposed containers.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, and Emergency Procedures**
Isolate area. Keep unnecessary and unprotected personnel from entering the area. Wear appropriate personal protective equipment. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

**Methods for Containment and Cleaning Up**
Absorb with a suitable inert material (sand, absorbite). Sweep up and place in an appropriate waste container.

## SECTION 7. HANDLING AND STORAGE

**Precautions for Safe Handling**
Wear gloves and safety glasses when handling. Wash hands thoroughly after use.

**Conditions for Safe Storage** Store in a cool, dry area. Keep from freezing.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters**

| Chemical Name | ACGIH® TLV® | | OSHA PEL | |
|---|---|---|---|---|
| | TWA | STEL | TWA | STEL |
| Cocamide DEA 68603-42-9 | None | | None | |
| Glycerin 56-81-5 | None | | 5 mg/m3 - Respirable fraction<br>15 mg/m3 – Total Dust | |

**Notes** Ensure eye wash and safety shower stations are close to work area.

**Appropriate Engineering Controls** Use good general ventilation

**Individual Protection Measures**

**Eye/Face Protection** Safety glasses/goggles if eye contact is likely.

**Skin Protection** Latex or rubber gloves if skin contact is likely.

**Respiratory Protection** None required

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** Beige viscous liquid

**Odour** Odourless

**Odour Threshold** Not applicable

**pH** 9 - 10

**Melting Point and Freezing Point** Not available

**Initial Boiling Point and Boiling Range** Not available

**Flash Point** Not available

**Evaporation Rate** Not available

**Flammability** Not flammable

**Upper and Lower Flammability or Explosive Limit** Not available

**Vapour Pressure** Not available

**Vapour Density (air = 1)** Not available

**Relative Density (water = 1)** 1.026

**Solubility in Water** Soluble

**Solubility in Other Liquids** Not available

**Partition Coefficient, n-Octanol / Water (Log Kow)** Not available

**Auto-ignition Temperature** Not available

**Decomposition Temperature** Not available

**Viscosity** 1000 cps (minimum)

## SECTION 10. STABILITY AND REACTIVITY

**Reactivity** None known

**Chemical Stability** Stable under normal conditions.

**Possibility of Hazardous Reactions** None known

**Conditions to Avoid** Avoid high temperatures.

**Incompatible Materials** Strong oxidizers.

**Hazardous Decomposition Products** CO, $CO_2$ and $SiO_2$

## SECTION 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure**

**X** Inhalation **X** Skin contact **X** Eye contact **X** Ingestion

**Acute Toxicity**

**$LC_{50}$ (Inhalation, 4hr)**
ATE mix: Not available

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**Spa Polish**

**$LD_{50}$ (Oral)**
ATE mix: > 5000 mg/kg Rat

**$LD_{50}$ (Dermal)**
ATE mix: > 5000 mg/kg Rabbit

**Ingestion** May cause nausea and vomiting.

**Inhalation** It may irritate respiratory system upon frequent or prolonged use.

**Skin Corrosion / Irritation** Causes mild skin irritation.

**Serious Eye Damage / Irritation** May cause eye irritation.

**STOT (Specific Target Organ Toxicity) - Single Exposure** No data available

**Aspiration Hazard** No data available

**STOT (Specific Target Organ Toxicity) - Repeated Exposure** No data available

**Respiratory and/or Skin Sensitization** No data available

**Carcinogenicity**

| Chemical Name | IARC | ACGIH® | OSHA |
|---|---|---|---|
| Cocamide DEA 68603-42-9 | Not available | | |
| Glycerin 56-81-5 | Not available | | |

**Reproductive Toxicity**

**Development of Offspring** No data available.

**Sexual Function and Fertility** No data available.

**Effects on or via Lactation** No data available.

**Germ Cell Mutagenicity** No data available.

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**Interactive Effects** No data available.

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity** No data available

**Persistence and Degradability** No data available

**Bioaccumulative Potential** No data available

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**Mobility in Soil** No data available

**Other Adverse Effects** No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal Methods** Dispose absorbed material in accordance with federal, provincial and local regulations.

## SECTION 14. TRANSPORT INFORMATION

| Regulation | UN No. | Proper Shipping Name | Technical Name (for N.O.S. entry) | Transport Hazard Class(es) | Packing Group |
|---|---|---|---|---|---|
| TDG | None | Not Regulated | None | None | None |
| DOT | None | Not Regulated | None | None | None |

**Special Precautions** None

**Environmental Hazards** None known

## SECTION 15. REGULATORY INFORMATION

**Safety, Health and Environmental Regulations**

**Canada**
**DSL/NDSL**
All components are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or are exempt.

**USA**
**TSCA**
All components are either on the Toxic Substances Control Act (TSCA) Inventory List or are exempt.

## SECTION 16. OTHER INFORMATION

**Prepared By (Group, Department):** Quality Assurance **Telephone:** (905) 332-6626

**Preparation Date:** March 24, 2017
**Date of Latest Revision:** March 11, 2022
**Additional Notes or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**SPA SHOCK** **WHMIS:** D2B

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Not applicable

**Chemical Family:** Not applicable

**Chemical Formula:** Mixture

**Trade Name & Synonyms:** Not applicable

**Molecular Weight:** Not applicable

**Material Use**: Spa water treatment chemical

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** H315 Skin corrosion/irritation, Category 2
H319 Serious eye damage/eye irritation, Category 2A
H335 Specific target organ toxicity, Single exposure, Respiratory tract irritation

**Label Elements**

**Symbol(s)**

**Signal Word** Warning

**Hazard statements** Causes skin and serious eye irritation.

**Precautionary statements** Avoid skin and eye contact. Wear gloves and safety glasses when handling. Wash hands thoroughly after use. If contact with eyes, flush with copious amounts of water for 15 minutes. Avoid breathing in dusts/fumes/vapours. If inhaled, remove person to fresh air and seek medical attention.

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Pentapotassium Bis(Peroxymonosulphate) Bis(Sulphate) | 70693-62-8 | 60 – 100 |
| Dipotassium Peroxodisulphate | 7727-21-1 | 0 – 5 |
| Sodium Carbonate | 497-19-8 | 10 – 30 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. If difficulty breathing, give artificial respiration and seek medical attention.

**Skin Contact:** Wash thoroughly with soap and water.

**Eye Contact:** Flush eyes with copious amounts of water and seek medical attention.

**Ingestion:** Drink 2 or 3 glasses of water or milk to dilute material. Do not induce vomiting. Contact a physician.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** At elevated temperatures of 100°C may liberate oxides of sulphur and carbon.

**Unusual Fire or Explosion Hazards:** None known

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media suitable for extinguishing surrounding fire.

**Instructions to the Fire Fighters:** See below

**Fire Fighting Protective Equipment:** Wear full protective clothing and a self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Prevent material from entering drains, sewers, and waterways. Sweep up and place metal waste containers for disposal.

# SAFETY DATA SHEET

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid contact with skin and eyes. Avoid breathing in dust. Wear gloves and safety glasses when handling. Wash hands thoroughly after use.

**Ventilation Requirements:** Use in a well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Do not mix directly with other chemicals. Keep containers tightly closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** General exhaust ventilation to keep airborne contaminants below exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** Wear air-purifying respirator with dust/mist cartridge if in a non-ventilated area.

**Other (Specify):** Impervious clothing if contact is likely. Eye wash and shower stations are close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **Solid** **X**

**Odour & Appearance:** Opaque, white granular, odourless

**Odour Threshold (ppm):** Not applicable

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Not applicable

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

**Decomposition Temp (°C)** Not available

**Specific Gravity:** Not available

**Viscosity:** Not applicable

**Vapour Pressure (mm):** Not applicable

**Vapour Density (Air-1):** Not applicable

| | |
|---|---|
| **Flashpoint (°C)** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Boiling Point (°C):** | Not available |
| **Freezing Point (°C):** | Not available |
| **Solubility In Water (20°C):** | Soluble |
| **% Volatile (By Weight)** | Not applicable |
| **PH:** | 6.5 – 7.5 (1% solution) |
| **Coefficient Of Water/Oil Distribution:** | Not available |

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** **Yes** **X** **No**

**If No, Under Which Conditions?:**

**Incompatibility To Other Substances:** **Yes** **X** **No**

**If So, Which Ones:** Heavy metal salts, halogenated compounds, cyanides, aluminum, and sulfamic acid.

**Conditions to Avoid:** Avoid extreme heat.

**Hazardous Decomposition Products:** Oxides of sulphur and carbon.

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** Dust may cause irritation to respiratory tract.

**Skin Contact:** Prolonged skin contact will cause irritation.

**Eye Contact:** Eye contact will cause irritation or burns.

**Ingestion:** Severe gastrointestinal irritation, nausea, vomiting and diarrhea.

**CHRONIC HEALTH EFFECTS:** None known

**Other Health Effects:** None known

**LD 50 of Material (Specify Species and Routes):** Pentopotassium Bis(Peroxymonosulphate)Bis(Sulphate) 500 mg/kg, Oral (Rat), >2000 mg/kg, Dermal (Rabbit)
Dipotassium Peroxodisulphate 802 mg/kg, Oral (Rat), >10000 mg/kg, Dermal (Rabbit)
Sodium Carbonate 4090 mg/kg, Oral (Rat), 2210 mg/kg, Dermal (Mouse).

**LC 50 of Material (Specify Species and Routes):** Pentopotassium Bis(Peroxymonosulphate)Bis(Sulphate) >5 mg/l, Inhalation 4 h (Rat)

**Exposure (Limits):** Pentopotassium Bis(Peroxymonosulphate)Bis(Sulphate), AEL* (Dupont): 1mg/m3, 15 minute TWA, Dipotassium Peroxodisulphate, TLV (ACGIH): 0.1 mg/m3, TWA as persulphate.

**Irritancy of Material** Eye, skin and respiratory tract irritant.

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity**

Pentopotassium Bis(Peroxymonosulphate)Bis(Sulphate) – 96 h LC50 Cyprinodon Variegatus (sheepshead minnow): 1.09 mg/l

- 72 h ERC50 Algae: 1mg/l
- 48 h EC50 Daphnia: 3.5 mg/l

Dipotassium Peroxodisulphate – 48 h LC50 Daphnia Magna (water flea): 92 mg/l

**Environmental Fate**

**Biodegradability:** Readily biodegradable

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Not available

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose of material in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Flush residues with lots of water.

**Disposal of Packaging:** Dispose of containers in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: D2B

**CPR Compliance** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR

**USA** Not available

**INTERNATIONAL** Not available

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **January 1, 1996**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**SPARKILIZER** **WHMIS:** Non Controlled

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Not applicable
**Chemical Family:** Cationic Polyelectrolyte
**Chemical Formula:** Proprietary Blend
**Trade Name & Synonyms:** Not applicable
**Molecular Weight:** Not applicable
**Material Use**: Water clarifier/coagulant

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** H412 Hazardous to the aquatic environment, Long term hazard, Category 3
**Symbol(s):** None
**Signal Word** None
**Hazard statement** Harmful to aquatic life with long lasting effects.
**Precautionary statement** Avoid release into the environment.

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|

No Regulated Components

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air if having difficulty breathing.
**Skin Contact:** Wash thoroughly with soap and water for 15 minutes.
**Eye Contact:** Flush eyes with copious amounts of water for 15 minutes. Seek medical attention if irritation persists.

**Ingestion:** Do not induce vomiting. Give water to dilute. Contact a physician if a large quantity of the product has been consumed.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Oxides of carbon and nitrogen.

**Unusual Fire or Explosion Hazards:** Not applicable

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** See below

**Fire Fighting Protective Equipment:** Wear full protective clothing and a self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Prevent entry into drains, sewers and waterways. Soak up spill with absorbent material. Sweep up and put into dry, clean and labelled containers for disposal. Due to the slippery nature of this product, clean up spills immediately and completely.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Wear gloves and safety glasses when handling. Wash hands thoroughly after use.

**Ventilation Requirements:** None required.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area. Do not freeze.

**Storage Requirements:** Store at room temperature. Keep containers tightly closed when not in use.

# SAFETY DATA SHEET

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** None required.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Rubber, PVC or latex gloves if skin contact is likely.

**Eye (Specify):** Safety glasses if eye contact is likely.

**Respiratory (Specify):** None

**Other (Specify):** Eye wash and shower stations are close to work area if needed.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **X** **Solid**

**Odour & Appearance:** Clear thick blue liquid, mild odour

**Odour Threshold (ppm):** Not applicable

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Not applicable

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

**Decomposition Temp (°C)** Not applicable

**Specific Gravity:** 1.010

**Viscosity:** 1300 cps min.

**Vapour Pressure (mm):** Not available

**Vapour Density (Air-1):** Not available

**Flashpoint (°C)** Not applicable

**Evaporation Rate** Not available

**Boiling Point (°C):** 100°C

**Freezing Point (°C):** 0°C

**Solubility In Water (20°C):** Soluble

**% Volatile (By Volume)** 94%

**PH:** 8 - 10

**Coefficient Of Water/Oil Distribution:** Not applicable

# SAFETY DATA SHEET

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** **Yes** **X** **No**

**If No, Under Which Conditions?:**

**Incompatibility To Other Substances:** **Yes** **X** **No**

**If So, Which Ones:** Strong oxidizers and strong alkalis e.g. ammonia and caustic soda.

**Conditions to Avoid:** Contact with incompatible materials.

**Hazardous Decomposition Products:** Oxides of carbon and nitrogen.

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** None

**Skin Contact:** May cause mild irritation.

**Eye Contact:** May cause mild irritation.

**Ingestion:** May cause gastritis – stomach upset, nausea, vomiting and diarrhea.

**CHRONIC HEALTH EFFECTS:** None known

**Other Health Effects:** None known

**LD 50 of Material (Specify Species and Routes):** Not available

**LC 50 of Material (Specify Species and Routes):** Not available

**Exposure (Limits):** None established

**Irritancy of Material** Mild skin and eye irritant

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity** Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**ALGAE TEST RESULTS:** Acute Toxicity, Seawater (ISO 10253)

72 h, Marine Algae (Skeletonema Costatum): 0.75 mg/l IC50

Growth Inhibition (OECD 201)

96 h, Green Algae (Selenastrum Capricornutum): >10-100 mg/l IC50

**FISH TEST RESULTS:** Acute Toxicity, Freshwater (OECD 203)

Zebra Fish (Brachydanio Rerio): >10-100 mg/l LC50

Acute Toxicity, Seawater (Parcom)

Juvenile Turbot (Scophthalmus Maximus): 1769 mg/l LC50

**INVERTEBRATE TEST RESULTS:** Acute Immobilization (OECD 202)

Water Flea (Daphnia Magna) : >10-100 mg/l EC50

Acute Invertebrate Toxicity, Seawater (Parcom)

Marine Copepod (Acartia Tonsa): 204 mg/l EC50 Immobilization

**Environmental Fate**

**Biodegradability:** This material is not readily biodegradable.

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Not available

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose absorbed material in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Remove residues by scrubbing.

**Disposal of Packaging:** Dispose of containers in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

# SAFETY DATA SHEET

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: Non Controlled

**CPR Compliance:** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**USA** Not available

**INTERNATIONAL** Not available

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **January 1, 1996**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Stabilized Granular Chlorine / Spa Granular**

**WHMIS: It is not regulated under WHMIS. It is regulated under the Pest Control Product Act (PCP).**

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Sodium Dichloro-S-Triazinetrione Dihydrate

**Chemical Family:** Chlorinated Isocyanurate

**Chemical Formula:** $NaCl_2(NCO)_3\ 2H_2O$

**Trade Name & Synonyms:** Dichloroisocyanuric Acid Sodium Salt Dihydrate

**Molecular Weight:** 256

**Material Use**: Pool water disinfectant

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:**

Acute toxicity, Oral, Category 4

Serious eye damage/eye irritation, Category 2

Specific target organ toxicity, Single exposure, Respiratory tract irritation, Category 3

Hazardous to the aquatic environment, Acute hazard, Category 1

Hazardous to the aquatic environment, Long-term hazard, Category 1

**Symbol(s)**

**Signal Word** Warning

**Hazard statements**

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

EUH031 Contact with acids liberates toxic gas.

**Precautionary statements**

P261 Avoid breathing dust.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor if you feel unwell.
P330 Rinse mouth.
P337+P313 If eye irritation persists: Get medical advice/attention.
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulations.

**NFPA: 2 Health, 0 Fire, 1 Reactivity Special Hazard Warning: OXIDIZER.**
**HMIS: 3 Health, 0 Fire, 1 Reactivity**

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Sodium Dichloroisocyanurate Dihydrate | 51580-86-0 | 60 – 100 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**Skin Contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**Eye Contact:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Note to physicians** Probable mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically and supportively.

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Chlorine, carbon monoxide and nitrogen trichloride.

**Unusual Fire or Explosion Hazards:** When heated to decomposition, may release poisonous and corrosive fumes of nitrogen trichloride, chlorine and carbon monoxide.

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Water only

**Instructions to the Fire Fighters:** Cool containers with water spray. On small fires, use water spray or fog. On large fires, use heavy deluge or fog streams. Flooding amounts of water may be required before extinguishment can be accomplished.

**Fire Fighting Protective Equipment:** Wear full protective clothing and self-contained breathing apparatus (SCBA) in positive pressure mode.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** For small spills in a well-ventilated area, wear a NIOSH approved half-face or full face tight fitting respirator or a loose fitting powered air purifying respirator equipped with chlorine cartridges. Chemical goggles should be worn when using a half-face respirator. In addition to respiratory protection, wear coveralls, chemical resistant gloves, chemical resistant footwear, and chemical resistant headgear for overhead exposure. For clean-up of large spills, or small dry spills in confined areas, wear full-face respirator with chlorine cartridges or a positive pressure supplied air respirator. Additionally, body protection should be impervious clothing covering entire body to prevent personal contact with material. CAUTION – If this

material becomes wet/damp or contaminated in a container, the formation of nitrogen trichloride gas may occur and an explosive condition may exist.

**Leak and Spill Procedure:** Hazardous concentrations in air may be found in local spill area and immediately downwind. If spill material is still dry, do not put water directly on this product as a gas evolution may occur. Do not contaminate spill material with any organic materials, ammonia, ammonium salts or urea. Clean up all spill material with clean, dry dedicated equipment and place in a clean dry container. This material is heavier than and soluble in water. Stop flow of material into water as soon as possible. Begin monitoring for available chlorine and pH immediately. Vapours may be suppressed by the use of water fog.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Do not take internally. Avoid contact with skin, eyes and clothing. Wash hands thoroughly with soap and water after use.

**Ventilation Requirements:** Local exhaust ventilation.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry, well-ventilated area.

**Storage Requirements:** Do not store at temperatures above 60°C/140°F. Keep away from incompatible materials. Do not allow water to get into containers. Keep containers tightly closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Neoprene gloves if skin contact is likely.

**Eye (Specify):** Safety glasses if skin contact is likely.

**Respiratory (Specify):** Use NIOSH/MSHA approved dust or vapour mask when airborne exposure limits are exceeded.

**Other (Specify):** Impervious body covering clothes, boots and neoprene apron. Eye wash and shower stations close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

| | | | | | |
|---|---|---|---|---|---|
| **Physical State:** | **Gas** | | **Liquid** | **Solid** | **X** |
| **Odour & Appearance:** | White, granular, chlorine odour. | | | | |
| **Odour Threshold (ppm):** | Not applicable | | | | |
| **Flammability:** | | **Yes** | **No** | **X** | |
| **If Yes, Under Which Conditions?:** | | | | | |
| **Auto Ignition Temperature (Celsius):** | Not self-ignitable. | | | | |
| **Upper Explosion Limit (% By Volume):** | Not determined | | | | |
| **Lower Explosion Limit (% By Volume):** | Not determined | | | | |
| **Decomposition Temp (°C)** | 240 - 250°C | | | | |
| **Specific Gravity:** | 0.982 g/ml | | | | |
| **Viscosity:** | Not applicable | | | | |
| **Vapour Pressure (mm):** | Not applicable | | | | |
| **Vapour Density (Air-1):** | Not applicable | | | | |
| **Flashpoint (°C)** | Not applicable | | | | |
| **Evaporation Rate** | Not applicable | | | | |
| **Boiling Point (°C):** | Not applicable | | | | |
| **Freezing Point (°C):** | Not applicable | | | | |
| **Solubility In Water (20°C):** | 24-25 g/100 g | | | | |
| **% Volatile (By Weight)** | Not applicable | | | | |
| **PH:** | 6-6.5 (1% solution) | | | | |
| **Coefficient Of Water/Oil Distribution:** | Not available | | | | |

## SECTION 10 STABILITY AND REACTIVITY

| | | | |
|---|---|---|---|
| **Chemical Stability:** | **Yes** | **X** | **No** |
| **If No, Under Which Conditions?:** | | | |
| **Incompatibility To Other Substances:** | **Yes** | **X** | **No** |
| **If So, Which Ones:** | Organic materials, reducing agents, nitrogen containing materials, other oxidizers, acids, bases, oils, grease, sawdust, dry fire extinguishers containing monoammonium compounds. | | |
| **Conditions to Avoid:** | Heating above decomposition temperature. Do not package in paper or cardboard. If this material becomes damp/wet or contaminated in a container, the formation of nitrogen trichloride gas may occur and an | | |

explosive condition may exist.

**Hazardous Decomposition Products:** Nitrogen trichloride, chlorine, and carbon monoxide.

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** Dust may cause eye, nose, throat and respiratory irritation. It may also cause burns to the respiratory tract with the production of lung edema that can result in shortness of breath, wheezing, choking, chest pain, and impairment of lung function.

**Skin Contact:** Causes severe irritation and/or burns characterized by redness, swelling and scab formation.

**Eye Contact:** Severe irritation and/or burns can occur. Contact may cause impairment of vision and corneal damage.

**Ingestion:** Irritation and/or burns can occur to the entire gastrointestinal tract, including the stomach and intestines, characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding and/or tissue ulceration. Ingestion causes severe damage to the gastrointestinal tract with the potential to cause perforation.

**CHRONIC HEALTH EFFECTS:** Prolonged skin exposure may cause permanent damage. Inhalation of high concentrations can result in permanent lung damage from the corrosive action of the lung.

**Other Health Effects:** Probable mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically and supportively.

**LD 50 of Material (Specify Species and Routes):** 1671 mg/kg, Oral (Rat), >5000 mg/kg, Dermal (Rat)

**LC 50 of Material (Specify Species and Routes):** Not available

**Exposure (Limits):** Not available

**Irritancy of Material** Skin, eyes, nose, throat and respiratory tract irritant.

**Sensitization of Material** None known

**Specific Target Organ Toxicity (STOT) - Single Exposure:** No data available

**Specific Target Organ Toxicity (STOT) – Repeated Exposure:** Chronic inhalation exposure may cause impairment of lung function and permanent lung damage. In the 28 day extended to 59 day study drinking water study (rat): NOAEL = 115 mg/kg bw/day.

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity**

**Aquatic Toxicity:**

**96 h LC50, Fish** 0.22 mg/l (rainbow trout)
0.28 mg/l (bluegill sunfish)

**48 h LC50, Daphnia magna** 0.2 mg/l

**Avian Toxicity:**

**Oral LD50, Bobwhite quail** 730 mg/kg

**Oral LD50, Mallard duck** 3300 mg/kg

**Dietary LC50, Mallard duck** >10000 ppm

**Dietary LC50, Bobwhite quail** >10000 ppm

**Environmental Fate**

**Biodegradability:** Not readily biodegradable. Rapidly hydrolyzes in water into Cyanuric acid.

**Bioaccumulative Potential:** Not expected to bioaccumulate

**Mobility In Soil:** The degradation product, Cyanuric acid, is weakly adsorbed to and highly mobile in all soils.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose dry material in accordance to all federal, provincial, and local regulations.

**Safe Handling of Residues:** See above.

**Disposal of Packaging:** Empty containers should be disposed in accordance to all federal, provincial, and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:** Not regulated for road transportation.

**Proper shipping name:** Not applicable

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**Marking:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102):** Not regulated for road transportation.

**Proper shipping name:** Not applicable
**Class:** Not applicable
**Packing group:** Not applicable
**UN:** Not applicable
**Marking:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA** All components of this substance are listed or exempt on the DSL.

**PCP** This product is a registered pesticide.

**USA** All components of this substance are listed or exempt from the inventory. This product is registered under FIFRA.

**SARA (311,312)** This product is categorized as an immediate health hazard, and fire and reactivity physical hazard.

**Massachusetts and Pennsylvania Right-to-Know Hazardous Substances Lists:** Listed.

**California Prop 65** This product does not contain any ingredient known to the State of California to cause cancer or reproductive toxicity as listed under the State drinking Water and Toxic Enforcement Act of 1986.

**Waste Classifications** If this product becomes a waste as defined under 40 CFR 261, it may meet the criteria of a hazardous waste. Please check with all federal, state and local regulations to determine if this product meets the definition of a hazardous waste listed under 40 CFR 262.11.

**Workplace Classification** This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**INTERNATIONAL**

**EU** Reported in EINECS

**Japan** ENCS no. (5)-1043, ISHL no. (5)-1043

**Australia, New Zealand Inventory, China Inventory, and Philippines** Listed

# SAFETY DATA SHEET

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **April 6, 2015**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# MATERIAL SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Super Clarifier** **WHMIS:** Non Controlled

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Not applicable
**Chemical Family:** Cationic Polyelectrolyte
**Chemical Formula:** Proprietary Blend
**Trade Name & Synonyms:** Not applicable
**Molecular Weight:** Not applicable
**Material Use**: Water clarifier/coagulant

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** H412 Hazardous to the aquatic environment, Long term hazard, Category 3
**Symbol(s):** None
**Signal Word** None
**Hazard statement** Harmful to aquatic life with long lasting effects.
**Precautionary statement** Avoid release into the environment.

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|

No Regulated Components

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air if having difficulty breathing.
**Skin Contact:** Wash thoroughly with soap and water for 15 minutes.
**Eye Contact:** Flush eyes with copious amounts of water for 15 minutes. Seek medical attention if irritation persists.

**Ingestion:** Do not induce vomiting. Give water to dilute. Contact a physician if a large quantity of the product

has been consumed.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Oxides of carbon and nitrogen.

**Unusual Fire or Explosion Hazards:** Not applicable

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** See below

**Fire Fighting Protective Equipment:** Wear full protective clothing and a self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Prevent entry into drains, sewers and waterways. Soak up spill with absorbent material. Sweep up and put into dry, clean and labelled containers for disposal. Due to the slippery nature of this product, clean up spills immediately and completely.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Wear gloves and safety glasses when handling. Wash hands thoroughly after use.

**Ventilation Requirements:** None required.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area. Do not freeze.

**Storage Requirements:** Store at room temperature. Keep containers tightly closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** None required.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Rubber, PVC or latex gloves if skin contact is likely.

**Eye (Specify):** Safety glasses if eye contact is likely.

**Respiratory (Specify):** None

**Other (Specify):** Eye wash and shower stations are close to work area if needed.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

**Physical State:** **Gas** **Liquid** **X** **Solid**

**Odour & Appearance:** Clear thick blue liquid, mild odour

**Odour Threshold (ppm):** Not applicable

**Flammability:** **Yes** **No** **X**

**If Yes, Under Which Conditions?:**

**Auto Ignition Temperature (Celsius):** Not applicable

**Upper Explosion Limit (% By Volume):** Not applicable

**Lower Explosion Limit (% By Volume):** Not applicable

**Decomposition Temp (°C)** Not applicable

**Specific Gravity:** 1.010

**Viscosity:** 1300 cps min.

**Vapour Pressure (mm):** Not available

**Vapour Density (Air-1):** Not available

**Flashpoint (°C)** Not applicable

**Evaporation Rate** Not available

**Boiling Point (°C):** 100°C

**Freezing Point (°C):** 0°C

**Solubility In Water (20°C):** Soluble

**% Volatile (By Weight)** 94%

**PH:** 8 - 10

**Coefficient Of Water/Oil Distribution:** Not applicable

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** **Yes** **X** **No**

**If No, Under Which Conditions?:**

**Incompatibility To Other Substances:** **Yes** **X** **No**

**If So, Which Ones:** Strong oxidizers and strong alkalis e.g. ammonia and caustic soda.

**Conditions to Avoid:** Contact with incompatible materials.

**Hazardous Decomposition Products:** Oxides of carbon and nitrogen.

# MATERIAL SAFETY DATA SHEET

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** None

**Skin Contact:** May cause mild irritation.

**Eye Contact:** May cause mild irritation.

**Ingestion:** May cause gastritis – stomach upset, nausea, vomiting and diarrhea.

**CHRONIC HEALTH EFFECTS:** None known

**Other Health Effects:** None known

**LD 50 of Material (Specify Species and Routes):** Not available

**LC 50 of Material (Specify Species and Routes):** Not available

**Exposure (Limits):** None established

**Irritancy of Material** Mild skin and eye irritant

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity** Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**ALGAE TEST RESULTS:** Acute Toxicity, Seawater (ISO 10253)

72 h, Marine Algae (Skeletonema Costatum): 0.75 mg/l IC50

Growth Inhibition (OECD 201)

96 h, Green Algae (Selenastrum Capricornutum): >10-100 mg/l IC50

**FISH TEST RESULTS:** Acute Toxicity, Freshwater (OECD 203)

Zebra Fish (Brachydanio Rerio): >10-100 mg/l LC50

Acute Toxicity, Seawater (Parcom)

Juvenile Turbot (Scophthalmus Maximus): 1769 mg/l LC50

**INVERTEBRATE TEST RESULTS:** Acute Immobilization (OECD 202)

Water Flea (Daphnia Magna) : >10-100 mg/l EC50

Acute Invertebrate Toxicity, Seawater (Parcom)

Marine Copepod (Acartia Tonsa): 204 mg/l EC50 Immobilization

**Environmental Fate**

**Biodegradability:** This material is not readily biodegradable.

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Not available

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose absorbed material in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Remove residues by scrubbing.

**Disposal of Packaging:** Dispose of containers in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: Non Controlled

**CPR Compliance:** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**USA** Not available

**INTERNATIONAL** Not available

# MATERIAL SAFETY DATA SHEET

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **May 29, 2015**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

**While Capo Industries Ltd. believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Capo Industries Ltd. assumes legal responsibility. They are offered solely for your consideration and verification. Any use of this data and information must be determined by the user to be in accordance with applicable Federal, Provincial and local laws and regulations.**

# MATERIAL SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Tile & Liner Cleaner** **WHMIS:** D2B

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Not applicable
**Chemical Family:** Not applicable
**Chemical Formula:** Not applicable
**Trade Name & Synonyms:** Not applicable
**Molecular Weight:** Not applicable
**Material Use**: All Purpose Cleaner

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** H315 Skin corrosion/irritation, Category 2
H320 Serious eye damage/eye irritation, Category 2B

**Symbol(s)**

**Signal Word** Warning
**Hazard statements** Causes skin irritation. Causes eye irritation.
**Precautionary statements** Avoid skin and eye contact. Wear gloves and safety glasses when handling. Wash hands thoroughly after use. If in eyes, flush with copious amounts of water for 20 minutes. Seek medical attention if irritation persists.

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Dipropylene Glycol Mono Methyl Ether | 34590-94-8 | 3 – 7 |
| Dipropylene Glycol Mono Butyl Ether | 29911-28-2 | 3 – 7 |
| Sodium Xylenesulphonate | 1300-72-7 | 3 – 7 |

| | | |
|---|---|---|
| Tetrasodium Ethylene Diamine Tetraacetate | 64-02-8 | 3 – 7 |
| Soda Ash | 497-19-8 | 1 – 5 |
| Sodium Dodecyl Benzene Sulfonate | 25155-30-0 | 1 – 5 |
| Ethoxylated C12-15 Alcohol | 68131-39-5 | 0.5 – 1.5 |
| D'Limonene | 5989-27-5 | 0.1 – 1.0 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. Seek medical attention if irritation persists.

**Skin Contact:** Wash thoroughly with soap and water.

**Eye Contact:** Flush eyes with copious amounts of water for 20 minutes. Seek medical attention if irritation persists.

**Ingestion:** Drink 2 to 3 glasses of water to dilute. Do not induce vomiting. Seek medical attention immediately.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** CO and CO2

**Unusual Fire or Explosion Hazards:** None known

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** See below

**Fire Fighting Protective Equipment:** Wear full protective clothing and a self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Absorb with synthetic or natural absorbent and place in a clean, dry labelled container for disposal. Flush area with copious amounts of water.

# MATERIAL SAFETY DATA SHEET

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid skin and eye contact. Wear gloves and safety glasses when handling. Wash hands thoroughly after use.

**Ventilation Requirements:** Use in a well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Keep away from incompatibles. Keep containers tightly closed when not in use.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** None required

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** None required

**Other (Specify):** Eye wash and shower stations are close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

| | | | | |
|---|---|---|---|---|
| **Physical State:** | **Gas** | **Liquid** | **X** | **Solid** |
| **Odour & Appearance:** | Clear blue liquid, lemon odour | | | |
| **Odour Threshold (ppm):** | Not available | | | |
| **Flammability:** | | **Yes** | **No** | **X** |
| **If Yes, Under Which Conditions?:** | | | | |
| **Auto Ignition Temperature (Celsius):** | Not applicable | | | |
| **Upper Explosion Limit (% By Volume):** | Not applicable | | | |
| **Lower Explosion Limit (% By Volume):** | Not applicable | | | |
| **Decomposition Temp (°C)** | Not available | | | |
| **Specific Gravity:** | 1.046 | | | |
| **Viscosity:** | Not available | | | |
| **Vapour Pressure (mm):** | Not available | | | |
| **Vapour Density (Air-1):** | Not available | | | |
| **Flashpoint (°C)** | Not applicable | | | |

| | |
|---|---|
| **Evaporation Rate** | Not available |
| **Boiling Point (°C):** | 100°C |
| **Freezing Point (°C):** | Not available |
| **Solubility In Water (20°C):** | Soluble |
| **% Volatile (By Weight)** | 89.0% |
| **PH:** | 10.5 |
| **Coefficient Of Water/Oil Distribution:** | Not available |

## SECTION 10 STABILITY AND REACTIVITY

| | | | |
|---|---|---|---|
| **Chemical Stability:** | **Yes** | **X** | **No** |
| **If No, Under Which Conditions?:** | | | |
| **Incompatibility To Other Substances:** | **Yes** | **X** | **No** |
| **If So, Which Ones:** | Oxidizing compounds | | |
| **Conditions to Avoid:** | None known | | |
| **Hazardous Decomposition Products:** | CO and CO2 | | |

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** None expected

**Skin Contact:** May cause irritation, burning and defatting of the skin.

**Eye Contact:** May cause irritation or burning of the eyes.

**Ingestion:** Gastrointestinal upset, vomiting, and possible diarrhea.

**CHRONIC HEALTH EFFECTS:** None known

**Other Health Effects:** None known

**LD 50 of Material (Specify Species and Routes):** Not available

**LC 50 of Material (Specify Species and Routes):** Not available

**Exposure (Limits):** Not established

**Irritancy of Material:** Skin and eye irritant.

**Sensitization of Material:** None known

**Synergistic Materials:** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity** Not available

**Environmental Fate**

**Biodegradability:** Not available

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Not available

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose absorbed material in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Flush with copious amounts of water.

**Disposal of Packaging:** Dispose packaging in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS**: D2B

**USA** Not available

**INTERNATIONAL** Not available

# MATERIAL SAFETY DATA SHEET

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **June 10, 2015**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

**While Capo Industries Ltd. believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Capo Industries Ltd. assumes legal responsibility. They are offered solely for your consideration and verification. Any use of this data and information must be determined by the user to be in accordance with applicable Federal, Provincial and local laws and regulations.**

# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Ultra Spa** **WHMIS:** D2A

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Not applicable
**Chemical Family:** Borates
**Chemical Formula:** Proprietary Blend
**Trade Name & Synonyms:** None
**Molecular Weight:** Not applicable
**Material Use**: Spa water conditioner & buffer

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** H302 Acute toxicity, Oral, Category 4
H335 Specific target organ toxicity, Single Exposure, Respiratory tract irritation, Category 3
H401 Hazardous to the aquatic environment, Acute hazard, Category 2

**Symbol(s)**

**Signal Word** Warning
**Hazard statements** Harmful if swallowed. May cause respiratory tract irritation. Toxic to aquatic life.
**Precautionary statements** Do not ingest. If ingested, do not induce vomiting, drink 2 or 3 glasses of water and seek medical attention. Avoid breathing in dusts/vapours/fumes. If inhaled, remove person to fresh air and seek medical attention. Avoid release into the environment.

# SAFETY DATA SHEET

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Sodium Tetraborate Pentahydrate | 12179-04-3 | 10 – 30 |
| Boric Acid | 10043-35-3 | 60 – 100 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. Administer artificial respiration if person is having difficulty breathing and seek medical attention.

**Skin Contact:** Wash thoroughly with soap and water. Seek medical attention if redness or irritation develops.

**Eye Contact:** Flush eyes with copious amounts of water for 20 minutes. Seek medical attention if irritation develops.

**Ingestion:** Do not attempt to give anything by mouth to an unconscious person. If victim is alert and not convulsing rinse mouth with water and give ½ to 1 glass of water to dilute material. Immediately contact local poison control centre. Vomiting should only be induced on the advice of a poison control centre or physician. If spontaneous vomiting occurs, have victim lean forward with head down to avoid inhaling in of vomitus. Rinse mouth and give more water. Immediately transport victim to an emergency facility.

**Note to physicians** For Borate ingestion or overexposure: Treat for Alkaline exposure or ingestion. Give vinegar in large amounts or water or diluted orange or lemon juice. Follow with demulcent. Do not use emetics or stomach tube. Assure adequate hydration. After ingestion or absorption into the blood stream of large amounts (15g or more), symptoms may appear after 24 to 72 hours. Borates are readily dissipated through the urine (20% in the first 24 hours). Observation only is required for adult ingestion of less than 6g of product. For ingestion in excess of 6g, maintain adequate kidney function and force fluids. Gastric lavage is recommended for symptomatic patients only. Hem dialysis should be reserved for massive acute ingestion or patients with renal failure. Boron assay of urine or blood is only useful for documenting exposure and should not be used to evaluate severity poisoning or to guide treatment.

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** Not applicable

**Unusual Fire or Explosion Hazards:** None known

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** See below

**Fire Fighting Protective Equipment:** Wear full protective clothing and a self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Sweep up material and place in clean, dry labelled container for disposal. Do not allow product to enter sewers or waterways. This material is toxic to aquatic life. The product can be toxic to plants.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid prolonged skin contact. Avoid breathing in dust. Wear gloves and safety glasses when handling. Wash hands thoroughly after use.

**Ventilation Requirements:** Use in a well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Do not store sealed containers at temperatures above 40°C. Avoid moisture contamination.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** Local exhaust ventilation to keep airborne contaminants below exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex, PVC or rubber gloves if prolonged skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** Wear dust mask if prolonged use in non-ventilated area is unavoidable.

**Other (Specify):** Wear a NIOSH/MSA approved dust mask for concentrations of nuisance dust up to 100 mg/m3. An air supplied respirator of concentrations higher or unknown. Eye wash and shower stations close to work area.

# SAFETY DATA SHEET

## SECTION 9 PHYSICAL DATA FOR MATERIAL

| | |
|---|---|
| **Physical State:** | **Gas** **Liquid** **Solid** **X** |
| **Odour & Appearance:** | Speckled blue powder, sweet odour |
| **Odour Threshold (ppm):** | Not applicable |
| **Flammability:** | **Yes** **No** **X** |
| **If Yes, Under Which Conditions?:** | |
| **Auto Ignition Temperature (Celsius):** | Not applicable |
| **Upper Explosion Limit (% By Volume):** | Not applicable |
| **Lower Explosion Limit (% By Volume):** | Not applicable |
| **Decomposition Temp (°C)** | Not available |
| **Specific Gravity:** | 0.849 |
| **Viscosity:** | Not applicable |
| **Vapour Pressure (mm):** | Not applicable |
| **Vapour Density (Air-1):** | Not applicable |
| **Flashpoint (°C)** | Not applicable |
| **Evaporation Rate** | Not applicable |
| **Boiling Point (°C):** | Not applicable |
| **Freezing Point (°C):** | 200°C |
| **Solubility In Water (20°C):** | 3.6% by weight |
| **% Volatile (By Weight)** | Not applicable |
| **PH:** | 7.0 – 8.0 (1% solution) |
| **Coefficient Of Water/Oil Distribution:** | Not applicable |

## SECTION 10 STABILITY AND REACTIVITY

| | |
|---|---|
| **Chemical Stability:** | **Yes** **X** **No** |
| **If No, Under Which Conditions?:** | |
| **Incompatibility To Other Substances:** | **Yes** **X** **No** |
| **If So, Which Ones:** | Elemental zirconium, base metals, alkali metals, reducing agents, and metal hydrides. |
| **Conditions to Avoid:** | Reacts with strong reducing agents such as metal hydrides or alkali metals to generate flammable and explosive hydrogen gas. |
| **Hazardous Decomposition Products:** | None known |

# SAFETY DATA SHEET

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** Dust may cause irritation to throat and nose and respiratory tract.

**Skin Contact:** Not expected to cause irritation under normal conditions. Skin contact may cause irritation due to abrasive action. May cause defatting, drying and cracking of the skin. May be readily absorbed through broken or damaged skin. Toxic effects may be delayed.

**Eye Contact:** Eye contact may cause irritation and possible damage due to abrasion.

**Ingestion:** Ingestion of large amounts may cause nausea, gastrointestinal upset and abdominal pain. May cause diarrhea, circulatory collapse, cyanosis, convulsions, coma, nausea, vomiting and death.

**CHRONIC HEALTH EFFECTS:** May lead to irritation and/or sensitivity of the skin.

**Other Health Effects:** Boric acid may cause cyanosis. Cyanosis is characterized by navy blue, almost black Lips, tongue and mucous membranes with skin colour being slate grey. Further Manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, Respiratory distress and death due to anoxia.

**LD 50 of Material (Specify Species and Routes):** Boric Acid**:** 2660 mg/kg, Oral (Rat), >2000 mg/kg, Dermal (Rabbit)
Sodium Tetraborate Pentahydrate 30%: 8866.7 mg/kg, Oral (Rat)

**LC 50 of Material (Specify Species and Routes):** Boric Acid: >2.0 mg/l, Inhalation (Rat)
Sodium Tetraborate Pentahydrate 30%: Not available

**Exposure (Limits):** Boric Acid ACGIH TLV, Inhalable fraction TWA: 2 mg/m3, 8 h, STEL: 6 mg/m3, 15 min. Sodium Tetraborate Pentahydrate ACGIH TLV, Inhalable fraction TWA: 2 mg/m3, STEL: 6 mg/m3, OSHA TWA: 10 mg/m3, Total Dust.

**Irritancy of Material** Skin, eye, nose and throat irritant.

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity** None known

**Reproductive Effects** Boric acid and borates may cause reproductive effects based on laboratory animal studies. Animal studies show that ingestion of large amounts of borates over prolonged periods causes a decrease in sperm production and testicle size in male laboratory animals. No symptoms have been noted in humans.

**Teratogenicity:** Boric acid and borates may cause teratogenic/embryo toxic effects based on studies on laboratory animals. Animal studies show that ingestion of large amount of borates over prolonged periods cause developmental effects in fetuses of pregnant female animals.

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity**

**BORIC ACID:** LC50 1100 mg/l, Fish (Oncorhynchus mykiss), 96 h

LC50 53 mg/l, Daphnia (Daphnia magna), 21 days

**SODIUM TETRABORATE PENTAHYDRATE:** Not available

**Environmental Fate**

**Biodegradability:** Boric acid and Sodium Tetraborate Pentahydrate decomposes in the environment to natural borate. In aqueous solutions Sodium Tetraborate Pentahydrate is converted substantially into dissociated boric acid.

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Sodium Tetraborate Pentahydrate is soluble in water and is leachable through normal soil.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose material in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Flush residues with copious amounts of water.

**Disposal of Packaging:** Empty containers should be recycled or disposed through an approved waste management facility.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

# SAFETY DATA SHEET

## SECTION 15 REGULATORY INFORMATION

**CANADA** All components of this product are either on the DSL or exempt

**WHMIS**: D2A

**CPR Compliance:** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**USA** Not available

**INTERNATIONAL** Not available

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **January 1, 1996**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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# SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**Whirlpool Rinse** **WHMIS:** D2B

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**Manufacturer's Name:** **CAPO INDUSTRIES LTD**
**Street Address:** **1200 CORPORATE DRIVE**
**City:** **BURLINGTON, ONTARIO**
**Postal Code:** **L7L 5R6**

**Emergency Telephone:** **Canutec (613) 996-6666 (Collect)**

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**Chemical Name:** Not applicable

**Chemical Family:** Not applicable

**Chemical Formula:** Not applicable

**Trade Name & Synonyms:** Not applicable

**Molecular Weight:** Not applicable

**Material Use**: Whirlpool Cleaner

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** H315 Skin corrosion/irritation, Category 2
H320 Serious eye damage/eye irritation, Category 2B

**Symbol(s)**

**Signal Word** Warning

**Hazard statements** Causes skin irritation. Causes eye irritation.

**Precautionary statements** Avoid skin and eye contact. Wear gloves and safety glasses when handling. Wash hands thoroughly after use. If in eyes, flush with copious amounts of water for 20 minutes. Seek medical attention if irritation persists.

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

| Ingredient | CAS# | % Concentration |
|---|---|---|
| Ethoxylated Propylated Isodecyl Alcohol | 37251-67-5 | 7 - 13 |
| Sodium Xylenesulphonate | 1300-72-7 | 5 - 10 |
| Sulphuric Acid | 7664-93-9 | 0.5 – 1.5 |

## SECTION 4 FIRST AID MEASURES

**Inhalation:** Remove person to fresh air. Seek medical attention if irritation persists.

**Skin Contact:** Wash thoroughly with soap and water.

**Eye Contact:** Flush eyes with copious amounts of water for 20 minutes. Seek medical attention if irritation persists.

**Ingestion:** Drink 2 to 3 glasses of water to dilute. Do not induce vomiting. Seek medical attention immediately.

**Note to physicians** None

## SECTION 5 FIRE – FIGHTING MEASURES

**Hazardous Combustion Products:** CO and CO2

**Unusual Fire or Explosion Hazards:** None known

**Sensitivity to Mechanical Impact**: None

**Rate of Burning:** Not applicable

**Explosive Power:** Not applicable

**Sensitivity to Static Discharge:** None

**Fire Extinguishing Media:** Use media suitable to extinguish source of fire.

**Instructions to the Fire Fighters:** See below

**Fire Fighting Protective Equipment:** Wear full protective clothing and a self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Absorb with synthetic or natural absorbent and place in a clean, dry labelled container for disposal. Flush area with copious amounts of water.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

**Handling Practices:** Avoid skin and eye contact. Wear gloves and safety glasses when handling. Wash hands thoroughly after use.

**Ventilation Requirements:** Use in a well ventilated area.

**STORAGE**

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Keep away from incompatibles. Keep containers tightly closed when not in use.

# SAFETY DATA SHEET

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**

**Engineering Controls:** None required

**PERSONAL PROTECTIVE EQUIPMENT**

**Skin (Specify):** Latex or rubber gloves if skin contact is likely.

**Eye (Specify):** Safety glasses/goggles if eye contact is likely.

**Respiratory (Specify):** None required

**Other (Specify):** Eye wash and shower stations are close to work area.

## SECTION 9 PHYSICAL DATA FOR MATERIAL

| | | | | | |
|---|---|---|---|---|---|
| **Physical State:** | **Gas** | | **Liquid** | **X** | **Solid** |
| **Odour & Appearance:** | Clear green liquid, floral scent. | | | | |
| **Odour Threshold (ppm):** | Not available | | | | |
| **Flammability:** | | **Yes** | | **No** | **X** |
| **If Yes, Under Which Conditions?:** | | | | | |
| **Auto Ignition Temperature (Celsius):** | Not applicable | | | | |
| **Upper Explosion Limit (% By Volume):** | Not applicable | | | | |
| **Lower Explosion Limit (% By Volume):** | Not applicable | | | | |
| **Decomposition Temp (°C)** | Not available | | | | |
| **Specific Gravity:** | 1.062 | | | | |
| **Viscosity:** | Not available | | | | |
| **Vapour Pressure (mm):** | Not available | | | | |
| **Vapour Density (Air-1):** | Not available | | | | |
| **Flashpoint (°C)** | Not applicable | | | | |
| **Evaporation Rate** | Not available | | | | |
| **Boiling Point (°C):** | 100°C | | | | |
| **Freezing Point (°C):** | Not available | | | | |
| **Solubility In Water (20°C):** | Soluble | | | | |
| **% Volatile (By Weight)** | 80.0% | | | | |
| **PH:** | 4.5 | | | | |
| **Coefficient Of Water/Oil Distribution:** | Not available | | | | |

# SAFETY DATA SHEET

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** **Yes** **X** **No**

**If No, Under Which Conditions?:**

**Incompatibility To Other Substances:** **Yes** **X** **No**

**If So, Which Ones:** Oxidizing compounds

**Conditions to Avoid:** None known

**Hazardous Decomposition Products:** CO and CO2

## SECTION 11 TOXICOLOGICAL INFORMATION

**ACUTE HEALTH EFFECTS**

**Inhalation:** None expected

**Skin Contact:** May cause irritation, burning and defatting of the skin.

**Eye Contact:** May cause irritation or burning of the eyes.

**Ingestion:** Gastrointestinal upset, vomiting, and possible diarrhea.

**CHRONIC HEALTH EFFECTS:** None known

**Other Health Effects:** None known

**LD 50 of Material (Specify Species and Routes):** Not available

**LC 50 of Material (Specify Species and Routes):** Not available

**Exposure (Limits):** Not established

**Irritancy of Material:** Skin and eye irritant.

**Sensitization of Material:** None known

**Synergistic Materials:** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

**Ecotoxicity** Not available

**Environmental Fate**

**Biodegradability:** Not available

**Bioaccumulative Potential:** Not available

**Mobility In Soil:** Not available

# SAFETY DATA SHEET

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste Disposal:** Dispose absorbed material in accordance with federal, provincial and local regulations.

**Safe Handling of Residues:** Flush with copious amounts of water.

**Disposal of Packaging:** Dispose packaging in accordance with federal, provincial and local regulations.

## SECTION 14 TRANSPORTATION INFORMATION

**CANADIAN TDG ACT SHIPPING DESCRIPTION:**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

**US DOT CLASSIFICATION (49CFR 172.101, 172.102)**

**Proper shipping name:** Not regulated

**Class:** Not applicable

**Packing group:** Not applicable

**UN:** Not applicable

## SECTION 15 REGULATORY INFORMATION

**CANADA WHMIS**: D2B

**USA** Not available

**INTERNATIONAL** Not available

## SECTION 16 OTHER INFORMATION

**Prepared By (Group, Department, Etc.):** **Quality Control** **Telephone:** **(905) 332-6626**

**Preparation Date:** **June 10, 2016**
**Date Revised:** **December 1, 2018**
**Additional Notes Or References:**

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