

SAFETY DATA SHEET

M47022 - ANSI - EN



Occidental Chemical Corporation

A subsidiary of Occidental Petroleum Corporation



TECHNICAL SODIUM CHLORITE (PESTICIDE)

SDS No.: M47022

SDS Revision Date: 14-Jul-2016

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Identification:	Occidental Chemical Corporation 5005 LBJ Freeway P.O. Box 809050 Dallas, TX 75380-9050 1-800-752-5151
24 Hour Emergency Telephone Number:	1-800-733-3665 or 1-972-404-3228 (USA); CANUTEC (Canada): 1-613-996-6666; CHEMTREC (within USA and Canada): 1-800-424-9300; CHEMTREC (outside USA and Canada): +1 703-527-3887; CHEMTREC Contract No: CCN16186
To Request an SDS:	MSDS@oxy.com or 1-972-404-3245
Customer Service:	1-800-752-5151 or 1-972-404-3700
Product Identifier:	TECHNICAL SODIUM CHLORITE (PESTICIDE)
Trade Name:	Technical Sodium Chlorite
Synonyms:	Sodium Chlorite Dry; Chlorous Acid, Sodium Salt
Product Use:	Technical Sodium Chlorite is a registered antimicrobial pesticide (EPA Registration Number: 5382-42). Its uses are potable water, industrial cooling water, mollusk control, food plant process water, wastewater, slime control in paper mills, and oilfield water
Uses Advised Against:	This is a pesticide product, do not use it in a pesticide application that is not included on its label
Note:	* Pulp and Paper; Cooling Tower Treatment are currently the only registered uses in Canada.

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SECTION 2. HAZARDS IDENTIFICATION

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

EMERGENCY OVERVIEW:

Color: White
Physical State: Solid
Appearance: Flakes
Odor: Chlorine

Signal Word: **DANGER**

MAJOR HEALTH HAZARDS: CORROSIVE. FATAL IF INHALED. TOXIC IF SWALLOWED. CAUSES SKIN IRRITATION. CAUSES SERIOUS EYE DAMAGE. INGESTION MAY CAUSE DAMAGE TO: BLOOD SYSTEM, AND KIDNEY SYSTEM. INHALATION MAY CAUSE DAMAGE TO THE RESPIRATORY SYSTEM. MAY CAUSE DAMAGE TO THE BLOOD AND KIDNEYS THROUGH PROLONGED OR REPEATED EXPOSURES.

PHYSICAL HAZARDS: STRONG OXIDIZER. Contact with other materials may cause fire or explosion.

AQUATIC TOXICITY: HARMFUL TO AQUATIC LIFE.

PRECAUTIONARY STATEMENTS: Keep away from heat/ sparks/ open flames/ hot surfaces. - No smoking. Keep/ Store away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles, acids, chlorine or organic materials. Wear protective gloves, protective clothing, eye, and face protection. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust. Avoid release to the environment.

ADDITIONAL HAZARD INFORMATION: This material is corrosive and an oxidizer. This material's pH and oxidative action contribute to its health and physical hazards.

GHS CLASSIFICATION:

GHS: CONTACT HAZARD - SKIN:	Category 2 - Causes skin irritation
GHS: CONTACT HAZARD - EYE:	Category 1 - Causes serious eye damage
GHS: ACUTE TOXICITY - INHALATION:	Category 2 - Fatal if inhaled
GHS: ACUTE TOXICITY - ORAL:	Category 3 - Toxic if swallowed
GHS: TARGET ORGAN TOXICITY (SINGLE EXPOSURE):	Category 2 - May cause damage to Respiratory System, Blood, Kidneys
GHS: TARGET ORGAN TOXICITY (REPEATED	Category 2 - May cause damage to Blood, Kidney through

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EXPOSURE):	prolonged or repeated exposure
HAZARDOUS TO AQUATIC ENVIRONMENT - ACUTE HAZARD:	Category 3 - Harmful to aquatic life

UNKNOWN ACUTE TOXICITY: Not applicable. 100% of this product consists of ingredient(s) of known acute toxicity. This product was tested as a whole. This information only pertains to untested mixtures.

GHS SYMBOL: Oxidizer, Skull and Crossbones, Corrosion, Health hazard



GHS SIGNAL WORD: DANGER

GHS HAZARD STATEMENTS:**GHS - Physical Hazard Statement(s)**

- May intensify fire; oxidizer

GHS - Health Hazard Statement(s)

- Fatal if inhaled
- Toxic if swallowed
- Causes serious eye damage
- Causes skin irritation
- May cause damage to organs: (Respiratory, Kidney, and Blood Systems)
- May cause damage to Renal system (Kidneys), and Blood system through prolonged or repeated exposure

GHS - Precautionary Statement(s) - Prevention

- Do not breathe dust, fume, gas, mist, vapors, or spray
- In case of inadequate ventilation, wear respiratory protection
- Wear protective gloves, protective clothing, eye, and face protection
- Wash thoroughly after handling
- Use only outdoors or in a well-ventilated area
- Do not eat, drink or smoke when using this product
- Keep away from heat
- Keep/Store away from clothing and other combustible materials
- Take any precaution to avoid mixing with combustibles

GHS - Precautionary Statement(s) - Response

- IF INHALED: Remove person to fresh air and keep comfortable for breathing
- Specific treatment is urgent (see Section 4 of SDS or first aid information on this label)
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Immediately call a POISON CENTER or doctor/physician
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Rinse mouth
- Specific treatment (see First Aid information on product label and/or Section 4 of the SDS)
- IF ON SKIN: Wash with plenty of water
- If skin irritation occurs: Get medical advice/attention

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- Take off contaminated clothing and wash it before reuse
- In case of fire: Use agent suitable for surrounding fire to extinguish

GHS - Precautionary Statement(s) - Storage

- Store locked up
- Store in a well-ventilated place. Keep container tightly closed

GHS - Precautionary Statement(s) - Disposal

- Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations

Hazards Not Otherwise Classified (HNOC)

None identified

See Section 11: TOXICOLOGICAL INFORMATION

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Sodium Chlorite Dry; Chlorous Acid, Sodium Salt

Component	Percent [%]	CAS Number
Sodium chlorite	77 - 83	7758-19-2
Sodium Chloride	11 - 19	7647-14-5
Water	1 - 5	7732-18-5

SECTION 4. FIRST AID MEASURES

INHALATION: If inhalation occurs and adverse effects result, remove to uncontaminated area. Evaluate ABC's (is Airway constricted, is Breathing occurring, and is blood Circulating) and treat symptomatically. GET MEDICAL ATTENTION IMMEDIATELY. Specific Treatment: There is no specific antidote. Treat symptomatically. Pulse oximetry may not be reliable, see notes to physician.

SKIN CONTACT: Brush off excess chemical. Immediately flush contaminated areas with water. Remove contaminated clothing, jewelry and shoes. Wash contaminated areas with large amounts of water. GET MEDICAL ATTENTION IMMEDIATELY. Thoroughly clean and dry contaminated clothing before reuse. Discard contaminated leather goods.

EYE CONTACT: Immediately flush contaminated eyes with a directed stream of water for as long as possible. Remove contact lenses, if present, then continue rinsing. GET MEDICAL ATTENTION IMMEDIATELY.

INGESTION: If swallowed, do not induce vomiting. Give large amounts of water. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. Never give anything by mouth to an unconscious or convulsive person. GET MEDICAL ATTENTION IMMEDIATELY. For specific treatment, see Notes to Physician.

Most Important Symptoms/Effects (Acute and Delayed):

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Acute Symptoms/Effects: Listed below.

Inhalation (Breathing): Respiratory System Effects: Exposure to airborne material may cause irritation, redness of upper and lower airways, coughing, laryngeal spasm and edema, shortness of breath, bronchio-constriction, and possible pulmonary edema. Severe and permanent scarring may occur. The pulmonary edema may develop several hours after a severe acute exposure.

Skin: Skin Irritation. Skin exposure may cause irritation, redness, itching, swelling, burning sensation.

Eye: Serious Eye Damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye.

Ingestion (Swallowing): Ingesting this material may cause irritation, nausea, and vomiting. Oxidation may cause significant metabolic issues such as: methemoglobinemia, hemolysis, and intravascular coagulation and renal failure.

Delayed Symptoms/Effects:

- Repeated and prolonged skin contact may cause a dermatitis

Interaction with Other Chemicals Which Enhance Toxicity: Mixing with ammonia, acids, detergents, or organic matter will release chlorinated compounds, which are irritating to eyes, lungs, and mucus membranes. Chlorine dioxide vapors are emitted when this product contacts acids, chlorine, or bleach.

Medical Conditions Aggravated by Exposure: May aggravate preexisting conditions such as: Eye disorders that decrease tear production or have reduced integrity. Skin disorders that compromise the integrity of the skin. Respiratory conditions including asthma and other breathing disorders. Ingestion may induce G6PD deficiency, hemolysis and renal failure. G6PD deficiency, hemoglobinopathies, renal compromise, and conditions causing hypoxia may be aggravated by ingestion of this material.

Protection of First-Aiders: Protect yourself by avoiding contact with this material. Avoid contact with skin and eyes. Do not ingest. Do not breathe dust. Use personal protective equipment. Refer to Section 8 for specific personal protective equipment recommendations. At minimum, treating personnel should utilize PPE sufficient for prevention of bloodborne pathogen transmission.

Notes to Physician: Chlorine dioxide vapors are emitted when this product contacts acids or chlorine. If these vapors are inhaled, monitor patient closely for delayed development of pulmonary edema which may occur up to 48-72 hours post-inhalation. Following ingestion, neutralization and use of activated charcoal is not indicated. Probable mucosal damage may contraindicate the use of gastric lavage. Treat as a corrosive due to the pH of this material. This is also a strong oxidizer which will react with tissue in the presence of water. For prolonged exposures and significant exposures, consider delayed injury to exposed tissues. There is no specific antidote. Treatment is supportive care. Follow normal parameters for airway, breathing, and circulation. Ingestion of even small amounts of solution should be closely monitored for methemoglobinemia, hemolysis, and glutathione depletion, followed by renal failure. This chemical acts similarly to its related compound chlorate, and produces a drug induced G6PD deficiency. Methylene blue has not been reported as effective. Consult the PubMed Case Report PMID 22996135 for the case description and treatment utilized.

SECTION 5. FIRE-FIGHTING MEASURES

Fire Hazard: Negligible fire hazard. Strong oxidizer. This product may represent an explosion hazard if it contacts acids, chlorine or organic materials (Refer to Section 10).

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Extinguishing Media: Use extinguishing agents appropriate for surrounding fire

Fire Fighting: Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Consider evacuation of personnel located downwind. Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Flood with fine water spray. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Hazardous Combustion Products: Chlorine, Oxides of sodium

Sensitivity to Mechanical Impact: Avoid mechanical shock or impact, if contaminated.

Sensitivity to Static Discharge: Not sensitive.

Lower Flammability Level (air): Not flammable

Upper Flammability Level (air): Not flammable

Flash point: Not applicable

Auto-ignition Temperature: Not applicable

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Isolate hazard area and deny entry. Keep unnecessary and unprotected personnel from entering the area. Avoid contact with skin and eyes. Do not breathe dust, fume, gas, mist, vapors, or spray. Do not ingest. Wear appropriate personal protective equipment recommended in Section 8, Exposure Controls / Personal Protection, of the SDS.

Methods and Materials for Containment and Cleaning Up:

DO NOT use floor sweeping compounds to clean up spills. Dampen and scoop spilled material into clean, dedicated equipment. Do not dry sweep. Every attempt should be made to avoid mixing spilled material with other chemicals or debris when cleaning up. Keep collected material damp and put into drums. Dispose of in accordance with all applicable regulations.

Environmental Precautions:

This material is harmful to aquatic life. Keep out of water supplies and sewers. Should not be released into the environment. Releases should be reported, if required, to appropriate agencies.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:

Do not taste or swallow. Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or dust when opening

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container. Avoid creation of dust or fumes. Wear personal protective equipment as described in Exposure Controls/Personal Protection (Section 8) of the SDS. Wash thoroughly after handling. Use clean, dry utensils. Do not add the product to any dispensing device containing residuals of other products. Contamination may start a chemical reaction with generation of heat, liberation of hazardous gases (chlorine dioxide a poisonous, explosive gas), and possible fire and explosion. Do not contaminate with acids, reducing agents, combustible materials, oxidizing materials, hypochlorite, organic solvents and compounds, garbage, dirt, organic matter, household products, chemicals, soap products, paint products, vinegar, beverages, oils, pine oil, dirty rags, sulfur-containing rubber, or any other foreign matter. Do not drop, roll or skid drums.

Safe Storage Conditions:

Store and handle in accordance with all current regulations and standards. Store in tightly closed, labeled containers away from combustible materials. Store in a cool, dry area. Store in a well-ventilated area. Do not allow water to get in container. Store below 125 °F (52 °C). Avoid exposure to sunlight or ultraviolet light. Keep separated from incompatible substances (see below or Section 10 of the Safety Data Sheet).

Incompatibilities/ Materials to Avoid:

acids, reducing agents, combustible material, oxidizing agents, hypochlorite, organic solvents and compounds, garbage, dirt, organic materials, household products, chemicals, soap products, paint products, vinegar, beverages, oils, pine oil, dirty rags, sulfur-containing rubber, or any other foreign matter

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Regulatory Exposure Limit(s): None. This product does not contain any components that have regulatory occupational exposure limits (OEL's) established.

OEL: Occupational Exposure Limit; OSHA: United States Occupational Safety and Health Administration; PEL: Permissible Exposure Limit; TWA: Time Weighted Average; STEL: Short Term Exposure Limit

NON-REGULATORY EXPOSURE LIMIT(S): No occupational exposure limits have been established at this time.

- The Non-Regulatory United States Occupational Safety and Health Administration (OSHA) limits, if shown, are the Vacated 1989 PEL's (vacated by 58 FR 35338, June 30, 1993).

- The American Conference of Governmental Industrial Hygienists (ACGIH) is a voluntary organization of professional industrial hygiene personnel in government or educational institutions in the United States. The ACGIH develops and publishes recommended occupational exposure limits each year called Threshold Limit Values (TLVs) for hundreds of chemicals, physical agents, and biological exposure indices.

Component	OXY REL 8 hr TWA	OXY REL STEL	OXY REL Ceiling
Sodium chlorite 7758-19-2 (77 - 83)	1 mg/m ³		-----

ENGINEERING CONTROLS: Use only in well-ventilated areas. Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: Wear chemical safety goggles. Where splashing or spraying is possible, use a face-shield in addition to chemical protective goggles. Provide an emergency eye wash fountain and quick drench shower in the

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immediate work area.

Skin and Body Protection: Wear protective clothing to minimize skin contact. Contaminated clothing should be removed and laundered before reuse. Discard contaminated leather goods.

Hand Protection: Wear appropriate chemical resistant gloves. Consult a glove supplier for assistance in selecting an appropriate chemical resistant glove.

Protective Material Types:
Neoprene

Respiratory Protection: A NIOSH approved respirator with N95 (dust, fume, mist) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. If chlorine or chlorine dioxide is present, an acid gas cartridge is also required. An approved self-contained breathing apparatus operated in the pressure demand mode or an airline respirator with escape pack is required when an air purifying respirator is not adequate or for spills / emergencies of unknown concentrations. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Appearance:	Flakes
Color:	White
Odor:	Chlorine
Odor Threshold [ppm]:	No data available.
Molecular Weight:	90.45
Molecular Formula:	NaClO ₂
Decomposition Temperature:	356-392F (180-200C) (°F)
Boiling Point/Range:	Not applicable
Freezing Point/Range:	Not applicable to solids.
Melting Point/Range:	356-392 F (180-200 C)
Vapor Pressure:	Not applicable
Vapor Density (air=1):	Not applicable
Density:	69 lbs/ft ³ (packed)
Water Solubility:	39% @ 25 C
pH:	12 @ 25 C (25% solution)
Evaporation Rate (ether=1):	Not applicable
Partition Coefficient (n-octanol/water):	No data available
Flash point:	Not applicable
Flammability (solid, gas):	Not flammable
Lower Flammability Level (air):	Not flammable
Upper Flammability Level (air):	Not flammable
Auto-ignition Temperature:	Not applicable
Viscosity:	Not applicable

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SECTION 10. STABILITY AND REACTIVITY**Reactivity:** Not reactive under normal temperatures and pressures.**Chemical Stability:** Stable at normal temperatures and pressures.**Possibility of Hazardous Reactions:** Avoid heat, flames, sparks and other sources of ignition. Avoid contamination with foreign materials. Avoid exposure to sunlight or ultraviolet light.**Conditions to Avoid:** (e.g., static discharge, shock, or vibration) -. Avoid mechanical shock or impact, if contaminated.**Incompatibilities/ Materials to Avoid:** acids, reducing agents, combustible material, oxidizing agents, hypochlorite, organic solvents and compounds, garbage, dirt, organic materials, household products, chemicals, soap products, paint products, vinegar, beverages, oils, pine oil, dirty rags, sulfur-containing rubber, or any other foreign matter**Hazardous Decomposition Products:** Chlorine dioxide is formed on contact with acids, Thermal decomposition products include chlorine and oxides of sodium**Hazardous Polymerization:** Will not occur.**SECTION 11. TOXICOLOGICAL INFORMATION****TOXICITY DATA:****PRODUCT TOXICITY DATA: TECHNICAL SODIUM CHLORITE (PESTICIDE)**

LD50 Oral: 278 mg/kg (Rat)	LD50 Dermal: > 2 g/kg (Rabbit)	LC50 Inhalation: 0.29 mg/L (4 hr-Rat)
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COMPONENT TOXICITY DATA:**Note:** The component toxicity data is populated by the LOLI database and may differ from the product toxicity data given.

Component	LD50 Oral:	LD50 Dermal:	LC50 Inhalation:
Sodium chlorite 7758-19-2	165 mg/kg (Rat)	107.2 mg/kg (Rabbit)	230 mg/m ³ (4 hr - Rat)
Sodium Chloride 7647-14-5	3000 mg/kg (Rat)	10 g/kg (Rabbit)	42 g/m ³ (1 hr-Rat)

POTENTIAL HEALTH EFFECTS:**Eye contact:** Causes serious eye damage. Eye exposures may cause burns to the eye lids,

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	conjunctivitis, corneal edema, and corneal burn. May cause permanent eye damage including blindness. Significant and prolonged contact may cause damage to the internal contents of eye.
Skin contact:	Contact causes skin irritation. Direct contact with wet material or by moist skin may cause severe irritation, pain, and possibly burns.
Inhalation:	May be fatal if inhaled. Inhalation may cause coughing, irritation (possibly severe), redness of upper and lower airways, shortness of breath, chemical burns and possibly pulmonary edema. Pulmonary edema may develop several hours after a severe acute exposure.
Ingestion:	Harmful if swallowed. Ingestion may cause irritation, nausea, and vomiting. Causes significant metabolic issues through oxidation. May induce methemoglobinemia, hemolysis, and intravascular coagulation and renal failure.

SIGNS AND SYMPTOMS OF EXPOSURE:

Depending on the degree and duration of exposure, possible signs and symptoms from contact of this material with the skin and eyes, breathing this material, and swallowing this material may include:

Inhalation (Breathing): Respiratory System Effects: Exposure to airborne material may cause irritation, redness of upper and lower airways, coughing, laryngeal spasm and edema, shortness of breath, bronchio-constriction, and possible pulmonary edema. Severe and permanent scarring may occur. The pulmonary edema may develop several hours after a severe acute exposure.

Skin: Skin Irritation. Skin exposure may cause irritation, redness, itching, swelling, burning sensation.

Eye: Serious Eye Damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye.

Ingestion (Swallowing): Ingesting this material may cause irritation, nausea, and vomiting. Oxidation may cause significant metabolic issues such as: methemoglobinemia, hemolysis, and intravascular coagulation and renal failure.

CHRONIC TOXICITY:

Sodium chlorite has produced hemolytic anemia in several animal species at concentrations of 100 mg/L or higher. In a subchronic study using rats, hematological alterations included decreased erythrocyte counts, hemoglobin levels, and hemacrit. Methemoglobin levels decreased in females, but increased in males. There is no evidence of kidney effects in humans; however, in animal studies with sodium chlorite, there is limited evidence of kidney effects. Repeated and prolonged skin contact may result in dermatitis.

Interaction with Other Chemicals Which Enhance Toxicity: Mixing with ammonia, acids, detergents, or organic matter will release chlorinated compounds, which are irritating to eyes, lungs, and mucus membranes. Chlorine dioxide vapors are emitted when this product contacts acids, chlorine, or bleach.

GHS HEALTH HAZARDS:

Listed below.

GHS: CONTACT HAZARD - EYE: Category 1 - Causes serious eye damage

SPECIFIC TARGET ORGAN TOXICITY (Single Exposure):

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Category 2 - Respiratory System, Blood, Kidneys

SPECIFIC TARGET ORGAN TOXICITY (Repeated or Prolonged Exposure):

Category 2 - Blood, Kidneys

MUTAGENIC DATA:

Not classified as a mutagen per GHS criteria. Sodium chlorite has tested positive in some studies. The significance of these test results for human health is unclear because the oxidizing effects of the chlorite or salting effects of sodium may significantly affect the ability of the tests to accurately detect mutagens.

REPRODUCTIVE TOXICITY:

Not classified as a reproductive toxin per GHS criteria. There is limited evidence of male reproductive effects in animal studies.

DEVELOPMENTAL TOXICITY:

Not classified as a developmental or reproductive toxin per GHS criteria. Observations in animal studies include decreased serum levels of thyroid hormones in offspring.

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:

Component	Freshwater Fish	Invertebrate Toxicity:	Algae Toxicity:	Other Toxicity:
Sodium chlorite	- No data available	- 0.012 - 0.018 mg/L EC50 0.25 - 0.33 mg/L EC50 = 0.026 mg/L EC50	- No data available	- No data available
Sodium Chloride	- LC50, fathead minnow (Pimephales promelas): 10,610 mg/l	- LC50, water flea Daphnia magna: 4,571 mg/l	- IC50, OECD 209 Test; activated sludge, respiration inhibition: > 1,000 mg/l	- IC50, OECD 209 Test; activated sludge, respiration inhibition: > 1,000 mg/l

Aquatic Toxicity:

LC50 rainbow trout = 290 mg/l as 80% NaClO₂ (96 hour); LC50 bluegill = 265-310 mg/l as 80% NaClO₂ (96 hour); LC50 Sheepshead minnow = 62-90 ppm (96 hour)

Invertebrate Toxicity:

LC50 Daphnia Magna = 0.29 mg/L as 80% NaClO₂ (48 hour)

Other Toxicity:

LD50 Mallard duck = 0.49-1.00g/kg as 80% NaClO₂ (gavage); LD50 Bob White quail = 0.66 g/kg as 80% NaClO₂ (gavage); Sodium chlorite in the diet of birds was not acutely toxic. Eight-day dietary LC50's in the Mallard duck and Bob White quail were > 10,000 ppm

FATE AND TRANSPORT:

BIODEGRADATION: Chlorite ions are reduced by some bacteria under anaerobic conditions.

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PERSISTENCE: This material will eventually degrade to sodium chloride.

BIOCONCENTRATION: This material will not bioaccumulate.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from material:

Dispose in accordance with all applicable regulations. Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor. Contact with incompatible materials could cause a reaction and fire. Keep out of water supplies and sewers. May be subject to disposal regulations.

Container Management:

Container management: Containers are non-refillable. Do not reuse or refill containers. Offer for recycling if available. Offer for reconditioning if appropriate. Triple rinse container promptly after emptying. Container rinsate must be disposed of in compliance with applicable regulations.

SECTION 14. TRANSPORT INFORMATION

LAND TRANSPORT

U.S. DOT 49 CFR 172.101:

UN NUMBER: UN1496
PROPER SHIPPING NAME: Sodium chlorite
HAZARD CLASS/ DIVISION: 5.1
PACKING GROUP: II
LABELING REQUIREMENTS: 5.1

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

UN NUMBER: UN1496
SHIPPING NAME: Sodium chlorite
CLASS OR DIVISION: 5.1
PACKING/RISK GROUP: II
LABELING REQUIREMENTS: 5.1

MARITIME TRANSPORT (IMO / IMDG) :

UN NUMBER: UN1496
PROPER SHIPPING NAME: Sodium Chlorite
HAZARD CLASS / DIVISION: 5.1
Packing Group: II
LABELING REQUIREMENTS: 5.1

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SECTION 15. REGULATORY INFORMATION

U.S. REGULATIONS**OSHA REGULATORY STATUS:**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

If a release is reportable under CERCLA section 103, notify the state emergency response commission and local emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675.

SARA EHS Chemical (40 CFR 355.30)

Not regulated

EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.10):

Acute Health Hazard, Chronic Health Hazard, Fire Hazard

EPCRA SECTION 313 (40 CFR 372.65):

Not regulated

OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119):

Not regulated

FIFRA REGULATIONS: Registered pesticide under 40 CFR 152.10, Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), EPA Reg. No. 5382-42 (Technical Sodium Chlorite)

FIFRA LABELING REQUIREMENTS: - This chemical is a pesticide product registered by the United States Environmental Protection Agency (EPA) and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

- FIFRA Signal Word - DANGER
- Corrosive
- Causes irreversible eye damage and skin burns
- May be fatal if swallowed
- Irritating to nose and throat
- This product is toxic to fish and aquatic organisms
- Danger: strong oxidizing agent
- Mix only into water
- Contamination may start a chemical reaction with generation of heat, liberation of hazardous gases (chlorine dioxide a poisonous, explosive gas), and possible fire and explosion
- Do not contaminate with moisture, garbage, dirt, organic matter, household products, chemicals, soap products, paint products, solvents, acids, vinegar, beverages, oils, pine oil, dirty rags, or any other foreign matter
- Do not use moist or damp utensils

NATIONAL INVENTORY STATUS

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U.S. INVENTORY STATUS: Toxic Substance Control Act (TSCA): All components are listed or exempt.**TSCA 12(b):** This product is not subject to export notification.**Canadian Chemical Inventory:** All components of this product are listed on either the DSL or the NDSL.

Component	DSL	NDSL
Sodium chlorite 7758-19-2	Listed	Not Listed
Sodium Chloride 7647-14-5	Listed	Not Listed

STATE REGULATIONS**California Proposition 65:**

This product and its ingredients are not listed, but it may contain impurities/trace elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act. For additional information, contact OxyChem Technical Services at 1-800-733-1165.

Component	California Proposition 65 Cancer WARNING:	California Proposition 65 CRT List - Male reproductive toxin:	California Proposition 65 CRT List - Female reproductive toxin:	Massachusetts Right to Know Hazardous Substance List	New Jersey Right to Know Hazardous Substance List	New Jersey Special Health Hazards Substance List
Sodium chlorite 7758-19-2	Not Listed	Not Listed	Not Listed	Listed	1689	corrosive; reactive - second degree
Sodium Chloride 7647-14-5	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

Component	New Jersey - Environmental Hazardous Substance List	Pennsylvania Right to Know Hazardous Substance List	Pennsylvania Right to Know Special Hazardous Substances	Pennsylvania Right to Know Environmental Hazard List	Rhode Island Right to Know Hazardous Substance List
Sodium chlorite 7758-19-2	Not Listed	Listed	Not Listed	Not Listed	Not Listed
Sodium Chloride 7647-14-5	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

CANADIAN REGULATIONS

• This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations

Component	Canadian Chemical Inventory:	NDSL:	WHMIS - Classifications of Substances:
Sodium chlorite	Listed		C,D1B
Sodium Chloride	Listed		Uncontrolled product according to WHMIS classification criteria

WHMIS Hazard Class:

- C Oxidizing materials
- D1A Very toxic materials
- D1B Toxic materials
- D2B Toxic materials

TECHNICAL SODIUM CHLORITE (PESTICIDE)

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- E Corrosive material

PCP Registration:

- This product is registered as a pesticide in Canada under PCP Reg No. 25361

SECTION 16. OTHER INFORMATION

Prepared by: OxyChem Corporate HESS - Product Stewardship

Rev. Date: 14-Jul-2016

Health Rating: 1

Flammability: 0

Reactivity Rating: 1

Reason for Revision:

- Updated the (M)SDS header
- Changed the SDS format to meet the GHS requirements of the revised 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
- Updated 24 Hour Emergency Telephone Number: SEE SECTION 1
- Product Identifier has been added or updated: SEE SECTION 1
- Updated Uses Advised Against information: SEE SECTION 1
- Revised Hazard(s) Identification information: SEE SECTION 2
- Added GHS Information: SEE SECTION 2
- Updated First Aid Measures: SEE SECTION 4
- Modified Fire Fighting Measure Recommendations: SEE SECTION 5
- Revised Accidental Release Measures: SEE SECTION 6
- Revised Handling and Storage Recommendations: SEE SECTION 7
- Updated Physical and Chemical Properties. SEE SECTION 9
- Stability and Reactivity recommendations: SEE SECTION 10
- Toxicological Information has been revised: SEE SECTION 11
- Updated Disposal Considerations. SEE SECTION 13
- Added SDS Revision Date: SEE SECTION 16
- Revised Preparer Information: SEE SECTION 16

IMPORTANT:

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OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Safety Data Sheet available to your employees

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SDS Revision Date: 14-Jul-2016

End of Safety Data Sheet