

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015. Revision Date: 11/27/17 Date of Issue: 11/27/2017 Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Sodium Chlorate with anti-clumping agent

Intended Use of the Product

Mainly used in the on-site production of chlorine dioxide for bleaching pulp. Also, used in the manufacture of dyes, explosives & matches, perchlorate manufacturing, ore processing, leather tanning and finishing, production of oxygen in rescue breathing apparatus, as an oxidizing agent, analytical reagent and herbicide.

Name, Address, and Telephone of the Responsible Party

Manufacturer

CHEMTRADE LOGISTICS INC. 155 Gordon Baker Road Suite 300 Toronto, Ontario M2H 3N5 For SDS Info: (416) 496-5856 www.chemtradelogistics.com

Emergency Telephone Number

Emergency Number :

Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300 INTERNATIONAL: +1-703-741-5970

Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC - Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification

Ox. Sol. 1H271Acute Tox. 4 (Oral)H302Aquatic Chronic 2H411

Full text of hazard classes and H-statements : see section 16

:

Label Elements

GHS Labeling

Hazard Pictograms

		*
GHS03	GHS07	GHS09

	GU202 GU207 GU209
Signal Word	: Danger
Hazard Statements	: H271 - May cause fire or explosion; strong oxidizer.
	H302 - Harmful if swallowed.
	H411 - Toxic to aquatic life with long lasting effects.
Precautionary Statements	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition
	sources. No smoking.
	P220 - Keep away from clothing and other combustible materials.
	P221 – Take any precaution to avoid mixing with combustibles and other incompatible
	materials
	P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
	P270 - Do not eat, drink or smoke when using this product.
	P273 - Avoid release to the environment.
	P280 - Wear protective gloves, protective clothing, and eye protection.
	P301+P312+P330 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.

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P371+P380+P375 - In case of major fire and large quantities: Evacuate area. Fight fire remotely due to high risk of explosion.
P306+P360 - IF ON CLOTHING: Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P391 - Collect spillage.
P420 Store away from incompatible materials
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Overexposure may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia.

Thermally unstable at elevated temperatures. (>265°C)

Unknown acute toxicity

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Name	Product Identifier	%*	GHS Ingredient Classification
Sodium chlorate	(CAS-No.) 7775-09-9	> 99	Ox. Sol. 1, H271
			Acute Tox. 4 (Oral), H302
			Aquatic Chronic 2, H411
Silica, amorphous, precipitated and gel	(CAS-No.) 112926-00-8	< 1	Comb. Dust

Full text of H-phrases: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Get medical advice/attention. Wash clothing before storing or reuse. Clean shoes thoroughly before reuse.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

General: Harmful if swallowed. Overexposure to this material may result in methemoglobinemia. Methemoglobinemia decreases the blood's ability to carry oxygen and results in symptoms such as dizziness, drowsiness, headache, shortness of breath, blue skin and lips, rapid heart rate, unconsciousness, and possibly death.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes.

Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

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SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water. Use water spray or fog.

Unsuitable Extinguishing Media: Do not use dry extinguishing powder. Foam. Carbon dioxide (CO₂). Do not use fire blanket.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: May cause fire or explosion; strong oxidizer.

Explosion Hazard: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. **Reactivity:** Oxidizer: increases the burning rate of combustible materials.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Irritating or toxic vapors. Halogenated compounds, metal oxide/oxides.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking, flames, hot surfaces, sparks, or other ignition sources in the area. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust. Keep away from combustible material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Use only non-sparking tools.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Do not take up in combustible material such as: saw dust or cellulosic material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing dust. Keep away from heat, sparks, open flames, hot surfaces, combustible materials, incompatible materials. - No smoking. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing. **Additional Hazards When Processed:** May cause fire or explosion; strong oxidizer.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.

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Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from extremely high or low temperatures, incompatible materials, food and drink. Keep in fireproof place. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Incompatible Materials: Strong acids. Reducing agents. Combustible materials. Ammonia. Organic materials. Reactive metals (Aluminum, Potassium, Zinc).

Specific End Use(s)

Mainly used in the on-site production of chlorine dioxide for bleaching pulp. Also, used in the manufacture of dyes, explosives & matches, perchlorate manufacturing, ore processing, leather tanning and finishing, production of oxygen in rescue breathing apparatus, as an oxidizing agent, analytical reagent and herbicide.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Silica, amorphous, precipi	tated and gel (112926-00-8)	
Mexico	OEL TWA (mg/m³)	10 mg/m ³
British Columbia	OEL TWA (mg/m³)	4 mg/m ³ (total dust)
		1.5 mg/m ³ (respirable dust)
New Brunswick	OEL TWA (mg/m³)	10 mg/m³
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³
Nunavut	OEL TWA (mg/m³)	10 mg/m³
Northwest Territories	OEL STEL (mg/m ³)	20 mg/m ³
Northwest Territories	OEL TWA (mg/m³)	10 mg/m ³
Québec	VEMP (mg/m ³)	6 mg/m ³ (containing no Asbestos and <1% Crystalline
		silica-respirable dust)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³
Saskatchewan	OEL TWA (mg/m³)	10 mg/m ³

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles or safety glasses.



Materials for Protective Clothing: Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical safety goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CH	EMICAL PROPERT	TIES
Information on Basic Physical a	nd Chemical Proper	rties
Physical State	:	Solid
Appearance	:	Colorless or white
Odor	:	None

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According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Odor Threshold	: Not available
рН	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not applicable
Auto-ignition Temperature	: Not applicable
Decomposition Temperature	: 265 °C (509 °F)
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: Not applicable
Upper Flammable Limit	: Not applicable
Vapor Pressure	: 0 mm Hg does not form a vapor
Relative Vapor Density at 20°C	: Not available
Relative Density	: Not available
Specific Gravity	: 2.49 g/cm ³
Solubility	: Soluble.
	Water: 96 - 100 g/100ml @ 20°C (68 °F)
Partition Coefficient: N-Octanol/Water	: Log Pow -7.18 (estimated)
Viscosity	: Not applicable

SECTION 10: STABILITY AND REACTIVITY

<u>Reactivity</u>: Oxidizer: increases the burning rate of combustible materials.

<u>Chemical Stability</u>: May cause fire or explosion; strong oxidizer.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

<u>Conditions to Avoid</u>: Extremely high or low temperatures and incompatible materials. Sparks, heat, open flame, combustible materials, organic material and other sources of ignition.

Incompatible Materials: Strong acids. Reducing agents. Organic materials. Mixture with flammable or combustible materials may ignite readily or explode and be sensitive to shock, heat, or friction. Mixtures of dry sodium chlorate with organic materials such as cloth, paper, leather, oils, greases, paints, and solvents may be readily ignited by heat or friction. Reacts violently with combustibles, sulfuric acid, and reducing materials. Explosions may be caused by contact with ammonia salts, ammonium thiosulfate, antimony sulfide, arsenic, carbon, charcoal, organic matter, organic acids, thiocyanates, chemically active metals, oils, metal sulfides, nitrobenzene, powdered metals, and sugar. Reacts with many organic materials to form shock-sensitive mixtures, causing explosion hazard.

<u>Hazardous Decomposition Products</u>: None expected under normal conditions of use. Decomposes at 265° C into oxygen and salt. Reacts with acids to produce chlorine, chlorine dioxide and perchloric acid.

1,212.12 mg/kg body weight

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Oral: Harmful if swallowed.

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data:

Sodium Chlorate with anti-clumping agent

ATE (Oral)

Skin Corrosion/Irritation: Not classified

Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

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Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Effects After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Effects After Skin Contact: Prolonged exposure may cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/Effects After Eye Contact: May cause slight irritation to eyes.

Symptoms/Effects After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts. Ingesting large quantities can cause abdominal pain, nausea, and diarrhea, possibly with dark blood, cyanosis, possibly progressing to headache, difficulty breathing, dizziness, seizures, or coma. Symptoms may include redness and edema. **Chronic Symptoms:** None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium chlorate (7775-09-9)					
LD50 Oral Rat	1200 mg/kg				
LD50 Dermal Rabbit	Rabbit > 2000 mg/kg				
LC50 Inhalation Rat	Inhalation Rat > 5.59 mg/l (Exposure time: 4.5 h)				
Sodium chlorate (7775-09-9)					
National Toxicology Program (NTP) Status Some evidence of carcinogentic activity.					
Silica, amorphous, precipitated and gel (112926-00-8	3)				
IARC Group	3				

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Toxic to aquatic life with long lasting effects.

Sodium chlorate (7775-09-9)	
LC50 Fish 1	13500 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
LC50 Fish 2	1750 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)

Persistence and Degradability

Sodium Chlorate with anti-clumping agent

Persistence and DegradabilityMay cause long-term adverse effects in the environment.

Bioaccumulative Potential

Sodium Chlorate with anti-clumping agent

Bioaccumulative Potential Not established.

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

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*When shipped in accordance with US DOT 49 CFR part 171.4(c) and other appropriate sections/provisions this material is not designated as a marine pollutant when transported by road or rail.

**When shipped in accordance with the Canada Transport of Dangerous Goods Regulations part 1.45.1 and other appropriate sections/provisions this material is not designated as a marine pollutant when transported by road or rail.

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

TRANSPORTATION CLASSIFICATION	DOT	TDG	IMDG	ΙΑΤΑ
Identification Number	UN1495	UN1495	UN1495	UN1495
Proper Shipping Name			SODIUM CHLORATE	SODIUM CHLORATE
Transport Hazard Class(es)	5.1	5.1	5.1	5.1
	OCOULER SS	51	51	5.1
Packing Group	11	11		11
Environmental Hazards	Marine Pollutant : Yes*	Marine Pollutant : Yes**	Marine Pollutant : Yes	Marine Pollutant: N/A
Emergency Response	ERG Number: 140	ERAP Index: Not applicable	EMS: F-H, S-Q	ERG code (IATA): 5L
Additional Information	Not applicable	Not applicable	Not applicable	Not applicable

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Chemical Name (CAS No.)	CERCLA RQ	EPCRA 304 RQ	SARA 302 TPQ	SARA 313
Sodium chlorate (7775-09-9)	Not applicable	Not applicable	Not applicable	No
Silica, amorphous, precipitated and gel (112926-00-8)	Not applicable	Not applicable	Not applicable	No

SARA 311/312

Sodium Chlorate with anti-clumping agent

Fire hazard. Immediate (acute) health hazard

US TSCA Flags Not present

US State Regulations

California Proposition 65

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Sodium chlorate (7775-09-9)	No	No	No	No
Silica, amorphous, precipitated and gel (112926-00-8)	No	No	No	No

State Right-To-Know Lists

Sodium chlorate (7775-09-9)

U.S. - Massachusetts - Right To Know List - Yes

U.S. - New Jersey - Right to Know Hazardous Substance List - Yes

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List - No

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No

U.S. - Pennsylvania - RTK (Right to Know) List - Yes

Silica, amorphous, precipitated and gel (112926-00-8)

U.S. - Massachusetts - Right To Know List - Yes

U.S. - New Jersey - Right to Know Hazardous Substance List - Yes

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- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List No
- U.S. Pennsylvania RTK (Right to Know) Special Hazardous Substances No
- U.S. Pennsylvania RTK (Right to Know) List Yes

Canadian Regulations

Sodium chlorate (7775-09-9)

Listed on the Canadian DSL (Domestic Substances List)

Not listed on the Canadian NDSL (Non-Domestic Substances List)

Silica, amorphous, precipitated and gel (112926-00-8)

Listed on the Canadian DSL (Domestic Substances List)

Not listed on the Canadian NDSL (Non-Domestic Substances List)

International Inventories/Lists

Chemical Name (CAS No.)	Australia AICS	Turkey CICR	Korea ECL	EU EINECS	EU ELINCS	EU SVHC	EU NLP	Mexico INSQ
Sodium chlorate (7775-09-9)	Yes	Yes	Yes	Yes	No	No	No	Yes
Silica, amorphous, precipitated and gel (112926- 00-8)	Yes	Yes	Yes	No	No	No	No	Yes
Chemical Name (CAS No.)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCL	Japan PRTR	Philippines PICCS	New Zealand NZIOC	US TSCA
Sodium chlorate (7775-09-9)	Yes	Yes	No	Yes	No	Yes	Yes	Yes
Silica, amorphous, precipitated and gel (112926- 00-8)	Yes	Yes	No	No	No	Yes	Yes	No

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision: 11/27/2017

Revision Summary

Section	Change	Date Changed
	New Product	

Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Comb. Dust	Combustible Dust
Ox. Sol. 1	Oxidizing solids Category 1
H271	May cause fire or explosion; strong oxidizer
H302	Harmful if swallowed
H411	Toxic to aquatic life with long lasting effects

NFPA Health Hazard : 1 NFPA Fire Hazard : 0 NFPA Reactivity Hazard : 3 NFPA Crossifie Uppende : OV
NFPA Reactivity Hazard : 3
•
NEDA Creatific Herende
NFPA Specific Hazards : OX - Materials that posses oxidizing properties.
HMIS Rating
Health : 1

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Flammability	: 0			
Physical	: 3			
PPE	See Section 8			
Abbreviations and Acrony	<u>ns</u>			
AICS – Australian Inventory of Chem	nical Substances	LC50 - N		
ACGIH – American Conference of Governmental Industrial Hygienists				
AIHA – American Industrial Hygiene	Association	LOAEL -		
ATE - Acute Toxicity Estimate		LOEC - I		
BCF - Bioconcentration factor		Log Pov		
BEI - Biological Exposure Indices (BE		NFPA 7		
CAS No Chemical Abstracts Servic		Identifi NIOSH -		
-	CERCLA RQ - Comprehensive Environmental Response, Compensation, and			
Liability Act - Reportable Quantity		NLP - Eu NOAEL		
CICR - Turkish Inventory and Control of Chemicals				
DOT – 49 CFR – US Department of Transportation – Code of Federal				
Regulations Title 49 – Transportatio		NZIOC - OEL - O		
EC50 - Median effective concentration				
ECL - Korea Existing Chemicals List				
EINECS - European Inventory of Existing Commercial Chemical Substances				
ELINCS - European List of Notified C		PICCS -		
EmS - IMDG Emergency Schedule Fi		PDSCL -		
ENCS - Japanese Existing and New C	•	PPE – P		
EPA – Environmental Protection Age	•	PRTR - J		
	ely Hazardous Substance Emergency	REL - Re SADT - S		
Planning and Community Right-to-k ERAP Index – Emergency Response		SADT - : SARA - :		
ErC50 - EC50 in Terms of Reduction		SARA SARA 30		
	onse Drill Code as found in the International	SARA 3		
Civil Aviation Organization (ICAO)	sise bill code as found in the international	SARA 3		
ERG No Emergency Response Gui	de Number	SRCL - S		
HCCL - Hazard Communication Carc		STEL - S		
HMIS – Hazardous Materials Inform	0	SVHC -		
IARC - International Agency for Rese	,	TDG – T		
o <i>i</i>	ssociation – Dangerous Goods Regulations	TLM - N		
IDLH - Immediately Dangerous to Life or Health				
IECSC - Inventory of Existing Chemical Substances Produced or Imported in				
China	• • • • •	TPQ - TI TSCA –		
IMDG - International Maritime Dang	gerous Goods Code	TWA - T		
INSQ - Mexican National Inventory	-	WEEL -		
ICI II I I I I I I I I I I I I I I I I				

ISHL - Japan Industrial Safety and Health Law

Median Lethal Concentration Median Lethal Dose - Lowest Observed Adverse Effect Level Lowest-observed-effect Concentration w - Octanol/water Partition Coefficient 704 – National Fire Protection Association - Standard System for the ication of the Hazards of Materials for Emergency Response - National Institute for Occupational Safety and Health Europe No Longer Polymers List - No-Observed Adverse Effect Level No-Observed Effect Concentration - New Zealand Inventory of Chemicals **Dccupational Exposure Limits** - Occupational Safety and Health Administration Permissible Exposure Limits Philippine Inventory of Chemicals and Chemical Substances - Japan Poisonous and Deleterious Substances Control Law Personal Protective Equipment Japan Pollutant Release and Transfer Register Recommended Exposure Limit Self Accelerating Decomposition Temperature Superfund Amendments and Reauthorization Act 302 - Section 302, 40 CFR Part 355 311/312 - Sections 311 and 312, 40 CFR Part 370 Hazard Categories 313 - Section 313, 40 CFR Part 372 Specifically Regulated Carcinogen List Short Term Exposure Limit - European Candidate List of Substance of Very High Concern Transport Canada Transport of Dangerous Goods Regulations Median Tolerance Limit hreshold Limit Value Threshold Planning Quantity United StatesToxic Substances Control Act Time Weighted Average

WEEL - Workplace Environmental Exposure Levels

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care^M.



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