

Sulfuric Acid, 15-33%

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: 05/07/2018

Date of Issue: 05/01/2015

Version: 3.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Sulfuric Acid, 15-33%

Formula: H₂-S-O₄

Intended Use of the Product

Industrial applications; battery electrolyte

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

Met. Corr. 1 H290

Skin Corr. 1A H314

Eye Dam. 1 H318

Carc. 1A H350

Aquatic Acute 3 H402

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

Label Elements

GHS Labeling

Hazard Pictograms



Signal Word

: Danger

Hazard Statements

: H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H350 - May cause cancer (Inhalation).
H402 - Harmful to aquatic life.

Precautionary Statements

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P234 - Keep only in original container.
P260 - Do not breathe vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
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.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a POISON CENTER or doctor.
P321 - Specific treatment (see section 4 on this SDS).
P363 - Wash contaminated clothing before reuse.
P390 - Absorb spillage to prevent material damage.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
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.

Unknown acute toxicity

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	%*	GHS Ingredient Classification
Water	(CAS-No.) 7732-18-5	67 - 85	Not classified
Sulfuric acid**	(CAS-No.) 7664-93-9	15 - 33	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Carc. 1A, H350 Aquatic Acute 3, H402

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%).

**Strong inorganic acid aerosols/mists containing this substance are carcinogenic to humans via inhalation. Under normal conditions of use this route of exposure is not expected.

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. Immediately flush skin with plenty of water for at least 30 minutes. Get immediate medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

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

Most Important Symptoms and Effects Both Acute and Delayed

General: Corrosive to eyes, respiratory system and skin. May cause cancer.

Inhalation: May be corrosive to the respiratory tract.

Skin Contact: Causes severe irritation which will progress to chemical burns.

Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

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Chronic Symptoms: Strong inorganic acid mists containing sulfuric acid are carcinogenic to humans. Prolonged inhalation of fumes or mists may cause erosion of the teeth.

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.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Foam, carbon dioxide, dry chemical.

Unsuitable Extinguishing Media: Do not use water. Do not get water inside containers. Do not apply water stream directly at source of leak.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction. This product may act as an oxidizer.

Advice for Firefighters

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

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

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

Hazardous Combustion Products: Toxic fumes are released.

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: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray. Do not handle until all safety precautions have been read and understood.

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.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb spillage to prevent material damage. Cautiously neutralize spilled liquid. 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. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing. Do not breathe vapors, mist, spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Additional Hazards When Processed: May be corrosive to metals. May release corrosive vapors. NEVER pour water into this substance; when dissolving or diluting always add it slowly to the water.

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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.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container.

Incompatible Materials: Combustible materials. Reducing agents. Strong oxidizers. Strong bases. Metals. Water.

Specific End Use(s)

Industrial applications; battery electrolyte

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.

Sulfuric acid (7664-93-9)		
Mexico	OEL TWA (mg/m ³)	1 mg/m ³
USA ACGIH	ACGIH TWA (mg/m ³)	0.2 mg/m ³ (thoracic particulate matter)
USA ACGIH	ACGIH chemical category	Suspected Human Carcinogen contained in strong inorganic acid mists
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1 mg/m ³
USA IDLH	US IDLH (mg/m ³)	15 mg/m ³
Alberta	OEL STEL (mg/m ³)	3 mg/m ³
Alberta	OEL TWA (mg/m ³)	1 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.2 mg/m ³ (Thoracic, contained in strong inorganic acid mists)
Manitoba	OEL TWA (mg/m ³)	0.2 mg/m ³ (thoracic particulate matter)
New Brunswick	OEL STEL (mg/m ³)	3 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	1 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	0.2 mg/m ³ (thoracic particulate matter)
Nova Scotia	OEL TWA (mg/m ³)	0.2 mg/m ³ (thoracic particulate matter)
Nunavut	OEL STEL (mg/m ³)	0.6 mg/m ³ (thoracic fraction)
Nunavut	OEL TWA (mg/m ³)	0.2 mg/m ³ (thoracic fraction)
Northwest Territories	OEL STEL (mg/m ³)	0.6 mg/m ³ (thoracic fraction, strong acid mists only)
Northwest Territories	OEL TWA (mg/m ³)	0.2 mg/m ³ (thoracic fraction, strong acid mists only)
Ontario	OEL TWA (mg/m ³)	0.2 mg/m ³ (thoracic)
Prince Edward Island	OEL TWA (mg/m ³)	0.2 mg/m ³ (thoracic particulate matter)
Québec	VECD (mg/m ³)	3 mg/m ³
Québec	VEMP (mg/m ³)	1 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	0.6 mg/m ³ (thoracic fraction)
Saskatchewan	OEL TWA (mg/m ³)	0.2 mg/m ³ (thoracic fraction)
Yukon	OEL STEL (mg/m ³)	1 mg/m ³
Yukon	OEL TWA (mg/m ³)	1 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.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Face shield. Insufficient ventilation: wear respiratory protection.



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Materials for Protective Clothing: Acid-resistant clothing.

Hand Protection: Wear protective gloves.

Eye Protection: Chemical safety goggles and face shield.

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 CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear
Odor	: Odorless to slight hydrocarbon and/or slight rotten eggs
Odor Threshold	: Not available
pH	: 0.3
Evaporation Rate	: Not available
Melting Point	: -37.4°C (-35.3°F) @ 30.79%; -55.2°C (-67.3°F) @ 39.92%; 36.4°C (33.5°F) @ 49.47%
Freezing Point	: Not available
Boiling Point	: 109°C (229°F) @ 32.05%; 118°C (244°F) @ 42.63%; 127°C (260°F) @ 50.87%
Flash Point	: Not applicable
Critical Temperature	: Not applicable
Auto-ignition Temperature	: Not applicable
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: Not applicable
Upper Flammable Limit	: Not applicable
Vapor Pressure	: 0.52 @ 30%; 2.10 @ 40%; 4.60 @ 50%
Relative Vapor Density at 20°C	: 3.4 (air=1)
Relative Density	: Not available
Specific Gravity	: 1.2288 @ 30.79%; 1.3063 @ 39.92%; 1.3942 @ 49.47%
Solubility	: Water: Soluble in cold and hot water Acetone: Partially soluble Organic solvent: Partially soluble in methanol
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction. This product may act as an oxidizer.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Extremely high or low temperatures and incompatible materials.

Incompatible Materials: Combustible materials. Reducing agents. Strong bases. Strong oxidizers. Metals. Water.

Hazardous Decomposition Products: Thermal decomposition generates: Corrosive vapors.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

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LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.

pH: 0.3

Eye Damage/Irritation: Causes serious eye damage.

pH: 0.3

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: May cause cancer (Inhalation).

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Effects After Inhalation: May be corrosive to the respiratory tract.

Symptoms/Effects After Skin Contact: Causes severe irritation which will progress to chemical burns.

Symptoms/Effects After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Effects After Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic Symptoms: Strong inorganic acid mists containing sulfuric acid are carcinogenic to humans. Prolonged inhalation of fumes or mists may cause erosion of the teeth.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sulfuric acid (7664-93-9)	
LD50 Oral Rat	2140 mg/kg
LC50 Inhalation Rat	510 mg/m ³ (Exposure time: 2 h)
Sulfuric acid (7664-93-9)	
IARC Group	1
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Strong inorganic acid mists containing sulfuric acid	
National Toxicology Program (NTP) Status	Known Human Carcinogens.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Harmful to aquatic life.

Sulfuric acid (7664-93-9)	
LC50 Fish 1	500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
LC50 Fish 2	42 mg/l (Exposure time: 96 h - Species: Gambusia affinis [static])

Persistence and Degradability

Sulfuric Acid, 15-33%	
Persistence and Degradability	Not established.

Bioaccumulative Potential

Sulfuric Acid, 15-33%	
Bioaccumulative Potential	Not established.
Sulfuric acid (7664-93-9)	
BCF Fish 1	(no bioaccumulation)

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.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.





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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

TRANSPORTATION CLASSIFICATION	DOT	TDG	IMDG	IATA
Identification Number	UN2796	UN2796	UN2796	UN2796
Proper Shipping Name	SULFURIC ACID	SULFURIC ACID	SULPHURIC ACID	SULPHURIC ACID
Transport Hazard Class(es)	8	8	8	8
				
Packing Group	II	II	II	II
Environmental Hazards	Marine Pollutant : No	Marine Pollutant : No	Marine Pollutant : No	Marine Pollutant: N/A
Emergency Response	ERG Number : 157	ERAP Index: Not applicable	EMS: F-A, S-B	ERG code (IATA): 8L
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
Sulfuric acid (7664-93-9)	1000 lb	1000 lb	1000 lb	Yes

SARA 311/312

Sulfuric Acid, 15-33%
Immediate (acute) health hazard. Delayed (chronic) health hazard. Reactive 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
Sulfuric acid (7664-93-9)	Yes	No	No	No
Strong inorganic acid mists containing sulfuric acid	Yes	No	No	No

State Right-To-Know Lists

Sulfuric acid (7664-93-9)
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 - Yes
U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances - No
U.S. - Pennsylvania - RTK (Right to Know) List - Yes

Canadian Regulations

Sulfuric acid (7664-93-9)
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

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Sulfuric acid (7664-93-9)	Yes	No	Yes	Yes	No	No	No	No
Chemical Name (CAS No.)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCL	Japan PRTR	Philippines PICCS	New Zealand NZIOC	US TSCA
Sulfuric acid (7664-93-9)	Yes	Yes	No	Yes	No	Yes	Yes	Yes

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

Date of Preparation or Latest Revision : 05/07/2018

Revision Summary

Section	Change	Date Changed
16	Data modified	05/07/2018

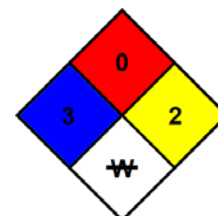
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

GHS Full Text Phrases:

Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H350	May cause cancer
H402	Harmful to aquatic life

NFPA 704

NFPA Health Hazard : 3
 NFPA Fire Hazard : 0
 NFPA Reactivity Hazard : 2
 NFPA Specific Hazards : W



HMIS Rating

Health : 3
 Flammability : 0
 Physical : 2
 PPE See Section 8

Abbreviations and Acronyms

AICS – Australian Inventory of Chemical Substances
 ACGIH – American Conference of Governmental Industrial Hygienists
 AIHA – American Industrial Hygiene Association
 ATE - Acute Toxicity Estimate
 BCF - Bioconcentration factor
 BEI - Biological Exposure Indices (BEI)
 CAS No. - Chemical Abstracts Service number
 CERCLA RQ - Comprehensive Environmental Response, Compensation, and Liability Act - Reportable Quantity
 CICR - Turkish Inventory and Control of Chemicals
 DOT – 49 CFR – US Department of Transportation – Code of Federal Regulations Title 49 – Transportation.
 EC50 - Median effective concentration
 ECL - Korea Existing Chemicals List
 EINECS - European Inventory of Existing Commercial Chemical Substances

LC50 - Median Lethal Concentration
 LD50 - Median Lethal Dose
 LOAEL - Lowest Observed Adverse Effect Level
 LOEC - Lowest-observed-effect Concentration
 Log Pow - Octanol/water Partition Coefficient
 NFPA 704 – National Fire Protection Association - Standard System for the Identification of the Hazards of Materials for Emergency Response
 NIOSH - National Institute for Occupational Safety and Health
 NLP - Europe No Longer Polymers List
 NOAEL - No-Observed Adverse Effect Level
 NOEC - No-Observed Effect Concentration
 NZIOC - New Zealand Inventory of Chemicals
 OEL - Occupational Exposure Limits
 OSHA – Occupational Safety and Health Administration
 PEL - Permissible Exposure Limits

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ELINCS - European List of Notified Chemical Substances	PICCS - Philippine Inventory of Chemicals and Chemical Substances
Ems - IMDG Emergency Schedule Fire & Spillage	PDSCL - Japan Poisonous and Deleterious Substances Control Law
ENCS - Japanese Existing and New Chemical Substances Inventory	PPE – Personal Protective Equipment
EPA – Environmental Protection Agency	PRTR - Japan Pollutant Release and Transfer Register
EPCRA 304 RQ – EPCRA 304 Extremely Hazardous Substance Emergency	REL - Recommended Exposure Limit
Planning and Community Right-to-Know-Act – Reportable Quantity	SADT - Self Accelerating Decomposition Temperature
ERAP Index – Emergency Response Assistance Plan Quantity Limit	SARA - Superfund Amendments and Reauthorization Act
ErC50 - EC50 in Terms of Reduction Growth Rate	SARA 302 - Section 302, 40 CFR Part 355
ERG code (IATA) - Emergency Response Drill Code as found in the International Civil Aviation Organization (ICAO)	SARA 311/312 - Sections 311 and 312, 40 CFR Part 370 Hazard Categories
ERG No. - Emergency Response Guide Number	SARA 313 - Section 313, 40 CFR Part 372
HCCL - Hazard Communication Carcinogen List	SRCL - Specifically Regulated Carcinogen List
HMIS – Hazardous Materials Information System	STEL - Short Term Exposure Limit
IARC - International Agency for Research on Cancer	SVHC – European Candidate List of Substance of Very High Concern
IATA - International Air Transport Association – Dangerous Goods Regulations	TDG – Transport Canada Transport of Dangerous Goods Regulations
IDLH - Immediately Dangerous to Life or Health	TLM - Median Tolerance Limit
IECSC - Inventory of Existing Chemical Substances Produced or Imported in China	TLV - Threshold Limit Value
IMDG - International Maritime Dangerous Goods Code	TPQ - Threshold Planning Quantity
INSQ - Mexican National Inventory of Chemical Substances	TSCA – United States Toxic Substances Control Act
ISHL - Japan Industrial Safety and Health Law	TWA - 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™.



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