

Prilled Sulfur

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: 05/09/2017

Date of Issue: 05/05/2015

Version: 2.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Prilled Sulfur

Synonyms: Brimstone, Flowers of sulfur, Sulphur

Intended Use of the Product

Manufacturing sulfuric acid, sulfur dioxide, fertilizer, carbon disulfide, plastics, enamels; vulcanizing rubber; synthesizing dyes; bleaching wood pulp.

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

Skin Irrit. 2 H315

Aquatic Acute 2 H401

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

Label Elements

GHS Labeling

Hazard Pictograms



Signal Word

: Warning

Hazard Statements

: H315 - Causes skin irritation.

H401 - Toxic to aquatic life.

Precautionary Statements

: 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.

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

P321 - Specific treatment (see section 4 on this SDS).

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Supplemental Information

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Proper grounding procedures to avoid static electricity should be followed. Prevent dust accumulation (to minimize explosion hazard). Avoid generating dust.

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Other Hazards

Contains a small amount of hydrogen sulfide. Hydrogen sulfide is a fatal, and highly flammable gas with a rotten egg odor that quickly causes odor fatigue. Heating of this product and storage under elevated temperatures or over long periods of time may release higher amounts of hydrogen sulfide. Hydrogen sulfide is also an asphyxiant. 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
Sulfur	(CAS No) 7704-34-9	> 99	Flam. Sol. 2, H228 Skin Irrit. 2, H315 Comb. Dust
Hydrogen sulfide	(CAS No) 7783-06-4	< 1	Flam. Gas 1, H220 Liquefied gas, H280 Acute Tox. 2 (Inhalation:gas), H330 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 1, H400

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: Using proper respiratory protection, move the exposed person to fresh air at once. Encourage exposed person to cough, spit out, and blow nose to remove dust. Immediately call a poison center, physician, or emergency medical service.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

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: Causes skin irritation.

Inhalation: Dust may be harmful or cause irritation. WARNING: irritating and toxic hydrogen sulfide gas may be present. Greater than 15-20ppm continuous exposure can cause mucous membrane and respiratory tract irritation. 50-500 ppm can cause headache, nausea, and dizziness. Continued exposure at these levels can lead to loss of reasoning and balance, difficulty in breathing, fluid in the lungs, and possible loss of consciousness. Greater than 500ppm can cause rapid unconsciousness and death if not promptly revived.

Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Signs and symptoms of inhaled chronic exposure to liberated hydrogen sulfide may include: Headaches, nausea, irritation of respiratory tract, pulmonary edema, anorexia, olfactory paralysis and sleep disturbances.

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: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

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Special Hazards Arising From the Substance or Mixture

Fire Hazard: Combustible Dust. Dust generated from processing may present a dust explosion hazard.

Explosion Hazard: If excessive dust is generated from processing, it may present a dust explosion hazard when dispersed in air at sufficient quantities in the presence of an ignition source.

Reactivity: Hazardous reactions will not occur under normal conditions.

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: Sulfur oxides. Hydrogen.

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

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: Avoid breathing dust. Avoid all contact with skin, eyes, or clothing. Avoid generating dust. Remove ignition sources. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

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 solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Avoid generation of dust during clean-up of spills.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Contact competent authorities after a spill. Use explosion proof vacuum during cleanup, with appropriate filter. Do not mix with other materials. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Use only non-sparking tools.

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 prolonged contact with eyes, skin and clothing. Avoid breathing dust. Avoid creating or spreading dust. Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

Additional Hazards When Processed: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations. Contains a small amount of hydrogen sulfide. Hydrogen sulfide is a fatal, and highly flammable gas with a rotten egg odor that quickly causes odor fatigue. Heating of this product and storage under elevated temperatures or over long periods of time may release higher amounts of hydrogen sulfide. Hydrogen sulfide is also an asphyxiant.

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. Avoid creating or spreading dust. Do not pressurize, cut or weld containers. Proper grounding procedures to avoid static electricity should be followed.

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.

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Incompatible Materials: Strong acids, strong bases, strong oxidizers. carbides, chlorates, nitrates, halogens, phosphorous, heavy metals.

Special Rules on Packaging: Contains sulfur, may release small amounts of hydrogen sulfide. Hydrogen sulfide is a highly flammable, explosive gas under certain conditions, is a toxic gas, and may be fatal. Gas can accumulate in the headspace of closed containers, use caution when opening sealed containers. Heating the product or containers can cause thermal decomposition of the product and release hydrogen sulfide.

Specific End Use(s)

Manufacturing sulfuric acid, sulfur dioxide, fertilizer, carbon disulfide, plastics, enamels; vulcanizing rubber; synthesizing dyes; bleaching wood pulp.

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.

Hydrogen sulfide (7783-06-4)		
Mexico	OEL TWA (mg/m ³)	14 mg/m ³
Mexico	OEL TWA (ppm)	10 ppm
Mexico	OEL STEL (mg/m ³)	21 mg/m ³
Mexico	OEL STEL (ppm)	15 ppm
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (ppm)	5 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	20 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	15 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (ppm)	10 ppm
USA IDLH	US IDLH (ppm)	100 ppm
Alberta	OEL Ceiling (mg/m ³)	21 mg/m ³
Alberta	OEL Ceiling (ppm)	15 ppm
Alberta	OEL TWA (mg/m ³)	14 mg/m ³
Alberta	OEL TWA (ppm)	10 ppm
British Columbia	OEL Ceiling (ppm)	10 ppm
Manitoba	OEL STEL (ppm)	5 ppm
Manitoba	OEL TWA (ppm)	1 ppm
New Brunswick	OEL STEL (mg/m ³)	21 mg/m ³
New Brunswick	OEL STEL (ppm)	15 ppm
New Brunswick	OEL TWA (mg/m ³)	14 mg/m ³
New Brunswick	OEL TWA (ppm)	10 ppm
Newfoundland & Labrador	OEL STEL (ppm)	5 ppm
Newfoundland & Labrador	OEL TWA (ppm)	1 ppm
Nova Scotia	OEL STEL (ppm)	5 ppm
Nova Scotia	OEL TWA (ppm)	1 ppm
Nunavut	OEL STEL (ppm)	15 ppm
Nunavut	OEL TWA (ppm)	10 ppm
Northwest Territories	OEL STEL (ppm)	15 ppm
Northwest Territories	OEL TWA (ppm)	10 ppm
Ontario	OEL STEL (ppm)	15 ppm
Ontario	OEL TWA (ppm)	10 ppm
Prince Edward Island	OEL STEL (ppm)	5 ppm
Prince Edward Island	OEL TWA (ppm)	1 ppm
Québec	VECD (mg/m ³)	21 mg/m ³
Québec	VECD (ppm)	15 ppm
Québec	VEMP (mg/m ³)	14 mg/m ³
Québec	VEMP (ppm)	10 ppm

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Saskatchewan	OEL STEL (ppm)	15 ppm
Saskatchewan	OEL TWA (ppm)	10 ppm
Yukon	OEL STEL (mg/m ³)	27 mg/m ³
Yukon	OEL STEL (ppm)	15 ppm
Yukon	OEL TWA (mg/m ³)	15 mg/m ³
Yukon	OEL TWA (ppm)	10 ppm
Sulfur (7704-34-9)		
Alberta	OEL TWA (mg/m ³)	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. Proper grounding procedures to avoid static electricity should be followed. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles or Safety glasses. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

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 CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Prill, bright yellow to brown
Odor	: Rotten eggs
Odor Threshold	: Not available
pH	: Not applicable
Evaporation Rate	: Not applicable
Melting Point	: 114 - 119 °C (237.2 - 246.2 °F)
Freezing Point	: Not applicable
Boiling Point	: 444.6 °C (832.28 °F)
Flash Point	: 207 °C (404.6 °F) Pensky-Martens Closed Cup
Auto-ignition Temperature	: 232 °C (449.6 °F)
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: 4 %
Upper Flammable Limit	: 44 %
Vapor Pressure	: 0.015 kPa (0.11 mm Hg)
Relative Vapor Density at 20°C	: 3.64 [Air = 1]
Relative Density	: Not available

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Specific Gravity	:	1.79
Solubility	:	Water: Insoluble Organic solvent: Soluble in carbon disulfide, benzene, toluene, chloroform, ether, warm aniline, carbon tetrachloride and liquid ammonia.
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

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. Sparks, heat, open flame and other sources of ignition. Dust accumulation (to minimize explosion hazard).

Incompatible Materials: Strong acids, strong bases, strong oxidizers, carbides, chlorates, nitrates, halogens, phosphorous, heavy metals.

Hazardous Decomposition Products: None expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes skin irritation.

pH: Not applicable

Eye Damage/Irritation: Not classified

pH: Not applicable

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

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Effects After Inhalation: Dust may be harmful or cause irritation. WARNING: irritating and toxic hydrogen sulfide gas may be present. Greater than 15-20ppm continuous exposure can cause mucous membrane and respiratory tract irritation. 50-500 ppm can cause headache, nausea, and dizziness. Continued exposure at these levels can lead to loss of reasoning and balance, difficulty in breathing, fluid in the lungs, and possible loss of consciousness. Greater than 500ppm can cause rapid unconsciousness and death if not promptly revived.

Symptoms/Effects After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

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

Symptoms/Effects After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Signs and symptoms of inhaled chronic exposure to liberated hydrogen sulfide may include: Headaches, nausea, irritation of respiratory tract, pulmonary edema, anorexia, olfactory paralysis and sleep disturbances.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Hydrogen sulfide (7783-06-4)	
LC50 Inhalation Rat	444 ppm/4h
Sulfur (7704-34-9)	
LD50 Oral Rat	> 3000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	> 9.23 mg/l/4h

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SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Toxic to aquatic life.

Hydrogen sulfide (7783-06-4)	
LC50 Fish 1	0.0448 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
LC50 Fish 2	0.016 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
Sulfur (7704-34-9)	
LC50 Fish 1	866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1	736 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

Persistence and Degradability

Prilled Sulfur	
Persistence and Degradability	Not established.

Bioaccumulative Potential

Prilled Sulfur	
Bioaccumulative Potential	Not established.
Hydrogen sulfide (7783-06-4)	
BCF Fish 1	(no bioaccumulation expected)
Log Pow	0.45 (at 25 °C)

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.

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.

Not regulated for transport

TRANSPORTATION CLASSIFICATION	DOT	TDG	IMDG	IATA
Additional Information	Solid sulfur is not subject to the requirements of title 49 CFR hazardous materials shipping guidelines if transported in a non-bulk packaging (less than 400 kg per package) or is formed to a specific shape (e.g., prills, granules, pellets, pastilles, or flakes). Based upon results of tests, it is	Solid sulfur is not subject to the requirements of the TDG code if transported in a non-bulk packaging (less than 400 kg per package) or is formed to a specific shape (e.g., prills, granules, pellets, pastilles, or flakes). Based upon results of tests, it is determined that formed sulphur does not meet the criteria for classification	Solid sulfur is not subject to the requirements of the IMDG code if formed to a specific shape (e.g., prills, granules, pellets, pastilles, or flakes). Based upon results of tests, it is determined that formed sulphur does not meet the criteria for classification in Class 4.1.	Solid sulfur is not subject to the requirements of IATA formed to a specific shape (e.g., prills, granules, pellets, pastilles, or flakes). Based upon results of tests, it is determined that formed sulphur does not meet the criteria for classification in Class 4.1.

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	determined that formed sulphur does not meet the criteria for classification in Class 4.1.	in Class 4.1.		
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In Accordance with UN Special provision 242: Sulphur is not subject to these regulations when it has been formed to a specific shape (e.g. prills, granules, pellets, pastilles or flakes).

In Accordance with IMSBC: Sulphur (crushed lump and coarse grained) Group B; Sulphur (formed, solid) IMSBC Group C

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Chemical Name (CAS No.)	CERCLA RQ	EPCRA 304 RQ	SARA 302 TPQ	SARA 313
Hydrogen sulfide (7783-06-4)	100 lb	100 lb	500 lb	Yes
Sulfur (7704-34-9)	Not applicable	Not applicable	Not applicable	No

SARA 311/312

Prilled Sulfur
Immediate (acute) health hazard. Delayed (chronic) health hazard. Fire hazard. Sudden release of pressure 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
Hydrogen sulfide (7783-06-4)	No	No	No	No
Sulfur (7704-34-9)	No	No	No	No

State Right-To-Know Lists

Hydrogen sulfide (7783-06-4) 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
Sulfur (7704-34-9) 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

Canadian Regulations

Hydrogen sulfide (7783-06-4) Listed on the Canadian DSL (Domestic Substances List) Not listed on the Canadian NDSL (Non-Domestic Substances List)
Sulfur (7704-34-9) 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
Hydrogen sulfide (7783-06-4)	Yes	No	Yes	Yes	No	No	No	Yes
Sulfur (7704-34-9)	Yes	Yes	Yes	Yes	No	No	No	Yes

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Chemical Name (CAS No.)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCCL	Japan PRTR	Philippines PICCS	New Zealand NZIOC	US TSCA
Hydrogen sulfide (7783-06-4)	Yes	Yes	No	No	No	Yes	Yes	Yes
Sulfur (7704-34-9)	Yes	No	No	No	No	Yes	Yes	Yes

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

Revision Date : 05/09/2017

Revision Summary

Section	Change	Date Changed
2	Classification modified	01/31/2017
3	Classification modified	01/31/2017
4	Language modified	01/31/2017
5	Language modified	01/31/2017
6	Language modified	01/31/2017
7	Language modified	01/31/2017
8	Language modified	01/31/2017
10	Language modified	01/31/2017
11	Data modified	01/31/2017
11	Language modified	01/31/2017
12	Data modified	01/31/2017
13	Language modified	01/31/2017
14	Language modified	01/31/2017
15	Language modified	01/31/2017
16	Classification Modified	01/31/2017

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. 2 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 2
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Comb. Dust	Combustible Dust
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Gas 1	Flammable gases Category 1
Flam. Sol. 2	Flammable solids Category 2
Liquefied gas	Gases under pressure Liquefied gas
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H220	Extremely flammable gas
H228	Flammable solid
H280	Contains gas under pressure; may explode if heated
H315	Causes skin irritation
H319	Causes serious eye irritation
H330	Fatal if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H401	Toxic to aquatic life

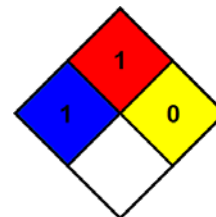
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NFPA 704

- NFPA Health Hazard** : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
- NFPA Fire Hazard** : 1 - Must be preheated before ignition can occur.
- NFPA Reactivity Hazard** : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS Rating

- Health** : 1 Slight Hazard - Irritation or minor reversible injury possible
- Flammability** : 1 Slight Hazard
- Physical** : 0 Minimal Hazard
- PPE** See Section 8

Abbreviations and Acronyms

AICS – Australian Inventory of Chemical Substances	ISHL - Japan Industrial Safety and Health Law
ACGIH – American Conference of Governmental Industrial Hygienists	LC50 - Median Lethal Concentration
AIHA – American Industrial Hygiene Association	LD50 - Median Lethal Dose
ATE - Acute Toxicity Estimate	LOAEL - Lowest Observed Adverse Effect Level
BCF - Bioconcentration factor	LOEC - Lowest-observed-effect Concentration
BEI - Biological Exposure Indices (BEI)	NFPA 704 – National Fire Protection Association - Standard System for the Identification of the Hazards of Materials for Emergency Response
CAS No. - Chemical Abstracts Service number	NIOSH - National Institute for Occupational Safety and Health
CERCLA RQ - Comprehensive Environmental Response, Compensation, and Liability Act - Reportable Quantity	NLP - Europe No Longer Polymers List
CICR - Turkish Inventory and Control of Chemicals	NOAEL - No-Observed Adverse Effect Level
DOT – 49 CFR – US Department of Transportation – Code of Federal Regulations Title 49 – Transportation.	NOEC - No-Observed Effect Concentration
EC50 - Median effective concentration	NZIOC - New Zealand Inventory of Chemicals
ECL - Korea Existing Chemicals List	OEL - Occupational Exposure Limits
EINECS - European Inventory of Existing Commercial Chemical Substances	OSHA – Occupational Safety and Health Administration
ELINCS - European List of Notified Chemical Substances	PEL - Permissible Exposure Limits
EmS - IMDG Emergency Schedule Fire & Spillage	PICCS - Philippine Inventory of Chemicals and Chemical Substances
ENCS - Japanese Existing and New Chemical Substances Inventory	PDSCL - Japan Poisonous and Deleterious Substances Control Law
EPA – Environmental Protection Agency	PPE – Personal Protective Equipment
EPCRA 304 RQ – EPCRA 304 Extremely Hazardous Substance Emergency Planning and Community Right-to-Know-Act – Reportable Quantity	PRTR - Japan Pollutant Release and Transfer Register
ERAP Index – Emergency Response Assistance Plan Quantity Limit	REL - Recommended Exposure Limit
ErC50 - EC50 in Terms of Reduction Growth Rate	SADT - Self Accelerating Decomposition Temperature
ERG code (IATA) - Emergency Response Drill Code as found in the International Civil Aviation Organization (ICAO)	SARA - Superfund Amendments and Reauthorization Act
ERG No. - Emergency Response Guide Number	SARA 302 - Section 302, 40 CFR Part 355
HCCL - Hazard Communication Carcinogen List	SARA 311/312 - Sections 311 and 312, 40 CFR Part 370 Hazard Categories
HMIS – Hazardous Materials Information System	SARA 313 - Section 313, 40 CFR Part 372
IARC - International Agency for Research on Cancer	SRCL - Specifically Regulated Carcinogen List
IATA - International Air Transport Association – Dangerous Goods Regulations	STEL - Short Term Exposure Limit
IDLH - Immediately Dangerous to Life or Health	SVHC – European Candidate List of Substance of Very High Concern
IECSC - Inventory of Existing Chemical Substances Produced or Imported in China	TDG – Transport Canada Transport of Dangerous Goods Regulations
IMDG - International Maritime Dangerous Goods Code	TLM - Median Tolerance Limit
INSQ - Mexican National Inventory of Chemical Substances	TLV - Threshold Limit Value
	TPQ - Threshold Planning Quantity
	TSCA – United States Toxic Substances Control Act
	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™.

Prilled Sulfur

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.



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