CHEMTRADE

ScavGuard™ 500

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

Version: 3.0

Hazardous Products Regulation, February 11, 2015.

Revision Date: 05/08/2018 Date of Issue: 05/02/2015

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: ScavGuard™ 500 Synonyms: Sodium bisulfite, SBS Intended Use of the Product

For the manufacture of oxygen scavenging and dechlorination, bleaching agent, and papermaking.

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
Resp. Sens. 1 H334
Skin Sens. 1 H317
Carc. 1B H350
Repr. 1B H360
Aquatic Acute 3 H402
Aquatic Chronic 3 H412

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

<u>Label Elements</u> GHS Labeling

Hazard Pictograms



Signal Word : Danger

Hazard Statements : H290 - May be corrosive to metals.

H317 - May cause an allergic skin reaction.

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H350 - May cause cancer.

H360 - May damage fertility or the unborn child.

H402 - Harmful to aquatic life.

H412 - Harmful to aquatic life with long lasting effects.

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.

P261 - Avoid breathing vapors, mist, or spray.

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P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, and eye protection.

P284 - In case of inadequate ventilation wear respiratory protection.

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

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

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

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

P362+P364 - Take off contaminated clothing and wash it 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	29 – 69.9	Not classified
Sodium bisulfite**	(CAS-No.) 7631-90-5	30 – 60 ⁺	Acute Tox. 4 (Oral), H302
			Aquatic Acute 3, H402
Cobalt sulfate	(CAS-No.) 10124-43-3	0.1 - 1.0 ⁺	Acute Tox. 4 (Oral), H302
			Eye Irrit. 2B, H320
			Resp. Sens. 1, H334
			Skin Sens. 1, H317
			Muta. 2, H341
			Carc. 1B, H350
			Repr. 1B, H360
			STOT RE 1, H372
			Aquatic Acute 1, H400
			Aquatic Chronic 1, H410

Full text of H-phrases: see section 16

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. 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.

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^{*}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%).

⁺The actual concentration of the ingredient(s) is withheld as a trade secret in accordance with Regulations Amending the Hazardous Products Regulations (HPR) SOR/2018-68 and 29 CFR 1910.1200.

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

Most Important Symptoms and Effects Both Acute and Delayed

General: May cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin sensitization. May cause cancer. May damage fertility. May damage the unborn child.

Inhalation: Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction.

Skin Contact: May cause an allergic skin reaction. **Eye Contact:** May cause slight irritation to eyes. **Ingestion:** Ingestion may cause adverse effects.

Chronic Symptoms: May cause cancer. May damage fertility or the unborn child.

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: Water spray, dry chemical, foam, carbon dioxide.

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

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.

Advice for Firefighters

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

 $\textbf{Firefighting Instructions:} \ \textbf{Use water spray or fog for cooling exposed containers.}$

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

Hazardous Combustion Products: Sulfur oxides. Sodium 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: Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing.

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.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb spillage to prevent material damage.

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.

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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. Do not handle until all safety precautions have been read and understood. Do not breathe vapors, mist, spray. Obtain special instructions before use. Avoid contact with skin, eyes and clothing.

Additional Hazards When Processed: May be corrosive to metals.

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 corrosive resistant container with a resistant inner liner.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Metals.

Specific End Use(s)

For the manufacture of oxygen scavenging and dechlorination, bleaching agent, and papermaking.

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.

Sodium bisulfite (7631-90-5)	Sodium bisulfite (7631-90-5)						
USA ACGIH	ACGIH TWA (mg/m³)	5 mg/m³					
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen					
USA NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m³					
Alberta	OEL TWA (mg/m³)	5 mg/m³					
British Columbia	OEL TWA (mg/m³)	5 mg/m³					
Manitoba	OEL TWA (mg/m³)	5 mg/m³					
New Brunswick	OEL TWA (mg/m³)	5 mg/m³					
Newfoundland & Labrador	OEL TWA (mg/m³)	5 mg/m³					
Nova Scotia	OEL TWA (mg/m³)	5 mg/m³					
Nunavut	OEL STEL (mg/m³)	10 mg/m³					
Nunavut	OEL TWA (mg/m³)	5 mg/m³					
Northwest Territories	OEL STEL (mg/m³)	10 mg/m³					
Northwest Territories	OEL TWA (mg/m³)	5 mg/m³					
Ontario	OEL TWA (mg/m³)	5 mg/m³					
Prince Edward Island	OEL TWA (mg/m³)	5 mg/m³					
Québec	VEMP (mg/m³)	5 mg/m³					
Saskatchewan	OEL STEL (mg/m³)	10 mg/m ³					
Saskatchewan	OEL TWA (mg/m³)	5 mg/m³					

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. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves. **Eye Protection:** Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

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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: Pale to deep pinkOdor: Pungent, sulfurous

Odor Threshold : Not available

pH : 3.8 - 5.2

Not available **Evaporation Rate Melting Point** Not available **Freezing Point** 6 °C (42.8 °F) **Boiling Point** 104 °C (219.2 °F) **Flash Point** 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 : 10.4 kPa (78 mm Hg) @20°C (68 °F)

Relative Vapor Density at 20°C : Not available Relative Density : Not available

Specific Gravity : 1.33

Solubility : Water: Miscible in all proportions in water.

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. **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: Strong acids, strong bases, strong oxidizers. 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: Not classified

pH: 3.8 - 5.2

Eye Damage/Irritation: Not classified

pH: 3.8 - 5.2

Respiratory or Skin Sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic

skin reaction.

Germ Cell Mutagenicity: Not classified **Carcinogenicity:** May cause cancer.

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Specific Target Organ Toxicity (Repeated Exposure): Not classified Reproductive Toxicity: May damage fertility or the unborn child. Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Effects After Inhalation: Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other

symptoms indicative of an allergic/sensitization reaction.

Symptoms/Effects After Skin Contact: May cause an allergic skin reaction. **Symptoms/Effects After Eye Contact:** May cause slight irritation to eyes. **Symptoms/Effects After Ingestion:** Ingestion may cause adverse effects.

Chronic Symptoms: May cause cancer. May damage fertility or the unborn child.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium bisulfite (7631-90-5)	
LD50 Oral Rat	1310 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	>= 5.5 mg/l/4h
Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg
Cobalt sulfate (10124-43-3)	
LD50 Oral Rat	424 mg/kg
Sodium bisulfite (7631-90-5)	
IARC Group	3
Cobalt sulfate (10124-43-3)	
IARC Group	2B
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

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

Sodium bisulfite (7631-90-5)	
EC50 Daphnia 1	119 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Cobalt sulfate (10124-43-3)	
LC50 Fish 1	3.6 mg/l

Persistence and Degradability

ScavGuard™ 500	
Persistence and Degradability	May cause long-term adverse effects in the environment.

Bioaccumulative Potential

ScavGuard™ 500			
Bioaccumulative Potential	Not established.		
Cobalt sulfate (10124-43-3)			
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

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.

TRANSPORTATION	DOT	TDG	IMDG	IATA	
CLASSIFICATION					
Identification Number	UN2693	UN2693	UN2693	UN2693	
Proper Shipping Name	BISULFITES, AQUEOUS	BISULFITES, AQUEOUS	BISULPHITES,	BISULPHITES,	
	SOLUTIONS, N.O.S.	SOLUTION, N.O.S.	AQUEOUS SOLUTION,	AQUEOUS	
			N.O.S.	SOLUTION, N.O.S.	
Transport Hazard	8	8	8	8	
Class(es)					
	CORROSIVE			8	
Packing Group	III	III	III	III	
Environmental Hazards	Marine Pollutant: No	Marine Pollutant : No	Marine Pollutant : No	Marine Pollutant:	
				N/A	
Emergency Response	ERG Number: 154	ERAP Index: Not	EMS: F-A, S-B	ERG code (IATA):	
		applicable		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
Sodium bisulfite (7631-90-5)	5000 lb	Not applicable	Not applicable	No
Cobalt sulfate (10124-43-3)	Not applicable	Not applicable	Not applicable	No

SARA 311/312

ScavGuard™	500
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Immediate (acute) health hazard. Delayed (chronic) 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 bisulfite (7631-90-5)	No	No	No	No	
Cobalt sulfate (10124-43-3)	Yes	No	No	No	

State Right-To-Know Lists

Sodium bisulfite (7631-90-5)

- 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

Cobalt sulfate (10124-43-3)

- U.S. Massachusetts Right To Know List No
- U.S. New Jersey Right to Know Hazardous Substance List No
- 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 No

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Canadian Regulations

Sodium bisulfite (7631-90-5)

Listed on the Canadian DSL (Domestic Substances List)

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

Cobalt sulfate (10124-43-3)

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	Turkey	Korea	EU	EU	EU	EU	Mexico
	AICS	CICR	ECL	EINECS	ELINCS	SVHC	NLP	INSQ
Sodium bisulfite (7631-90-5)	Yes	Yes	Yes	Yes	No	No	No	Yes
Cobalt sulfate (10124-43-3)	Yes	Yes	Yes	Yes	No	Yes	No	Yes
Chemical Name (CAS No.)	China	Japan	Japan	Japan	Japan	Philippines	New	US
	IECSC	ENCS	ISHL	PDSCL	PRTR	PICCS	Zealand	TSCA
							NZIOC	
Sodium bisulfite (7631-90-5)	Yes	Yes	No	No	No	Yes	Yes	Yes
Cobalt sulfate (10124-43-3)	Yes	Yes	No	No	Yes	Yes	Yes	Yes

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

Date of Preparation or Latest Revision : 05/25/2017

Revision Summary

Section	Change	Date Changed
2	Classification modified	05/25/2017
2	Language modified	05/25/2017
3	Classification modified	05/25/2017
4	Classification modified	05/25/2017
5	Language modified	05/25/2017
6	Language modified	05/25/2017
7	Language modified	05/25/2017
8	Language modified	05/25/2017
10	Language modified	05/25/2017
11	Data modified	05/25/2017
12	Language modified	05/25/2017
16	Data modified	05/25/2017

Other Information

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Carc. 1B	Carcinogenicity Category 1B
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Met. Corr. 1	Corrosive to metals Category 1
Muta. 2	Germ cell mutagenicity Category 2
Repr. 1B	Reproductive toxicity Category 1B
Resp. Sens. 1	Respiratory sensitization, Category 1
Skin Sens. 1	Skin sensitization, Category 1

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[:] 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).

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STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
H290	May be corrosive to metals
H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H320	Causes eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H341	Suspected of causing genetic defects
H350	May cause cancer
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA 704

NFPA Health Hazard : 2 NFPA Fire Hazard : 0 NFPA Reactivity Hazard : 0

HMIS Rating

Health : 2 Flammability : 0 Physical : 0

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

ELINCS - European List of Notified Chemical Substances EmS - IMDG Emergency Schedule Fire & Spillage

ENCS - Japanese Existing and New Chemical Substances Inventory

EPA – Environmental Protection Agency

EPCRA 304 RQ – EPCRA 304 Extremely Hazardous Substance Emergency Planning and Community Right-to-Know-Act – Reportable Quantity ERAP Index – Emergency Response Assistance Plan Quantity Limit

ErC50 - EC50 in Terms of Reduction Growth Rate

ERG code (IATA) - Emergency Response Drill Code as found in the International

Civil Aviation Organization (ICAO)

ERG No. - Emergency Response Guide Number HCCL - Hazard Communication Carcinogen List HMIS – Hazardous Materials Information System IARC - International Agency for Research on Cancer

IATA - International Air Transport Association - Dangerous Goods Regulations

IDLH - Immediately Dangerous to Life or Health

IECSC - Inventory of Existing Chemical Substances Produced or Imported in

China

IMDG - International Maritime Dangerous Goods Code

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

PICCS - Philippine Inventory of Chemicals and Chemical Substances PDSCL - Japan Poisonous and Deleterious Substances Control Law

PPE – Personal Protective Equipment

PRTR - Japan Pollutant Release and Transfer Register

REL - Recommended Exposure Limit

SADT - Self Accelerating Decomposition Temperature SARA - Superfund Amendments and Reauthorization Act

SARA 302 - Section 302, 40 CFR Part 355

SARA 311/312 - Sections 311 and 312, 40 CFR Part 370 Hazard Categories

SARA 313 - Section 313, 40 CFR Part 372 SRCL - Specifically Regulated Carcinogen List

STEL - Short Term Exposure Limit

SVHC – European Candidate List of Substance of Very High Concern TDG – Transport Canada Transport of Dangerous Goods Regulations

TLM - Median Tolerance Limit TLV - Threshold Limit Value TPQ - Threshold Planning Quantity

TSCA – United StatesToxic Substances Control Act

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INSQ - Mexican National Inventory of Chemical Substances

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 $^{\text{TM}}$.



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