

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixtures

Product Name: Aqua Ammonia

Chemical Name: Ammonium Hydroxide Solution

CAS-No.: 1336-21-6

Formula: NH₄OH (aq)

Synonyms: Ammonia, aqueous solution, Ammonium hydroxide ((NH₄)(OH)), Ammonia aqueous, Ammonia solution, AMMONIUM HYDROXIDE, Ammonia, aqueous, Ammonia solutions, Ammonia...%

Intended Use of the Product

Fertilizer; extracting metals from their ores; manufacturing of plastics, fibers, resins, explosives, detergents, pesticides, pharmaceuticals, ammonium compounds, and other chemicals.

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

Acute Tox. 4 (Oral) H302

Skin Corr. 1B H314

Eye Dam. 1 H318

STOT SE 3 H335

Aquatic Acute 1 H400

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

Label Elements

GHS Labeling

Hazard Pictograms



Signal Word

: Danger

Hazard Statements

: H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

Precautionary Statements

: P260 - Do not breathe gas, vapors, fume, mist, spray

P261 - Avoid breathing fume, mist, spray, vapors

P264 - Wash clothing thoroughly after handling

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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.

P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 - Wear eye protection, face protection, protective gloves, protective clothing
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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
P310 - Immediately call a POISON CENTER or doctor/physician
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P321 - Specific treatment (see Section 4)
P330 - If swallowed, rinse mouth
P363 - Wash contaminated clothing before reuse
P391 - Collect spillage
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container to local, regional, national, 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	30 - 75	Not classified
Ammonium hydroxide	(CAS-No.) 1336-21-6	10 - 30 ⁺ 15 - 40 ⁺	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400

Full text of H-phrases: see section 16

*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.

*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: IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: Using proper respiratory protection, immediately move the exposed person to fresh air. Keep at rest and in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Seek immediate medical advice. Symptoms may be delayed.

Skin Contact: Remove/Take off immediately all contaminated clothing. Immediately flush skin with plenty of water for at least 60 minutes. Seek medical attention immediately if exposure is severe. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse. Do not apply salves or ointments to the affected area.

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Eye Contact: Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Most Important Symptoms and Effects Both Acute and Delayed

General: Harmful if swallowed. Corrosive. Causes burns. Causes severe skin burns and eye damage. May be corrosive to the respiratory tract.

Inhalation: Contact may cause immediate severe irritation progressing quickly to chemical burns. Danger of serious damage to health by prolonged exposure through inhalation. May cause pulmonary edema. Symptoms may be delayed.

Skin Contact: Causes severe skin burns. Redness. Pain. Serious skin burns. Blisters.

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

Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Swallowing a small quantity of this material will result in serious health hazard.

Chronic Symptoms: Repeated or prolonged inhalation may damage lungs. Prolonged and repeated contact will eventually cause permanent tissue damage. Repeated or prolonged exposure may damage kidneys.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand. Acute respiratory effects, including pulmonary edema, may be delayed. Pneumonitis should be anticipated after inhalation or ingestion. If severe exposure is suspected, observe for 48-72 hours for delayed pulmonary edema.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry powder, alcohol-resistant foam, water in large amounts, 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. Ammonia vapor concentrations between 16% and 25% can explode on contact with an ignition source.

Reactivity: Ammonium hydroxide reacts with many heavy metals and their salts forming explosive compounds. It attacks many metals forming flammable/explosive gas. The solution in water is a strong base, it reacts violently with acids.

Advice for Firefighters

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

Firefighting Instructions: Keep upwind. Use water spray or fog for cooling exposed containers. Do not get water inside containers. Do not apply water stream directly at source of leak. Do not breathe fumes from fires or vapors from decomposition.

Protection During Firefighting: Firefighters must use full bunker gear including NIOSH-approved positive-pressure self-contained breathing apparatus to protect against potential hazardous combustion and decomposition products.

Hazardous Combustion Products: Nitrogen oxides. Nitrogen compounds. Ammonia.

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: Avoid all contact with skin, eyes, and clothing. Do not breathe vapor, mist or spray.

For Non-Emergency Personnel

Protective Equipment: Use recommended respiratory protection. Wear suitable protective clothing, gloves and eye/face protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Evacuate unnecessary personnel. Ventilate area. Keep upwind.

For Emergency Personnel

Protective Equipment: Use recommended respiratory protection. Wear suitable protective clothing, gloves and eye/face protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Evacuate unnecessary personnel. Ventilate area.

Environmental Precautions

Avoid release to the environment. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

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.

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Methods for Cleaning Up: Ventilate area. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Collect absorbed material and place into a sealed, labelled container for proper disposal. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Avoid all eyes and skin contact and do not breathe vapor and mist. Wear recommended personal protective equipment. Ensure there is adequate ventilation. Keep away from heat and open flame.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Wash contaminated clothing before reuse.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Detached outside storage is preferable. Store away from oxygen and oxidizers. Keep/Store away from extremely high or low temperatures and incompatible materials.

Incompatible Materials: Oxidizers. Halogens (F, Cl, Br, I). Gold. Mercury. Hypochlorites. Copper and its alloys. Aluminum alloys. Galvanized surfaces.

Storage Area: Store in dry, cool area. Store in a well-ventilated place. Keep away from combustible materials. Keep away from sources of ignition - No smoking. Protect from high temperatures.

Specific End Use(s)

Fertilizer; extracting metals from their ores; manufacturing of plastics, fibers, resins, explosives, detergents, pesticides, pharmaceuticals, ammonium compounds, and other chemicals.

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.

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. Provide sufficient ventilation to keep ammonia vapors below the permissible exposure limit. Ensure all national/local regulations are observed.

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



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Impermeable protective gloves.

Eye Protection: Chemical safety goggles and face shield.

Skin and Body Protection: Wear suitable protective clothing. Chemical resistant suit. Rubber apron, boots.

Respiratory Protection: For exposures at or below 300 ppm use a NIOSH-approved, full-face, negative-pressure respirator fitted with ammonia vapor cartridges. For exposure concentrations above 300 ppm, use a full-face, positive-pressure, self-contained breathing apparatus.

Environmental Exposure Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear
Odor	: Ammonia

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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	: 0.043 - 5 ppm @ 30% (w/w).
pH	: 13 @ 10%/ 11.6 @ 1N.
Evaporation Rate	: Not available
Melting Point	: Not applicable
Freezing Point	: -72.4°C (-98.3°F) @ 30% (w/w) -73°C (-100°F) @ 10 - 35% (w/w) -77°C (-107°F) @ 27 - 30% (w/w)
Boiling Point	: 27.2°C (81°F) @ 30% (w/w) 38°C (100°F) @ 10 - 35% (w/w)
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: 63.3 kPa (475 mm Hg) (at 20°C) @ 30% (w/w) 48 kPa (360 mm Hg) (at 20°C) @ 10 - 35% (w/w).
Relative Vapor Density at 20°C	: 0.618 @ 15°C (59°F) (Air=1) @ 30% (w/w) 0.6 - 1,2 (Air = 1) @ 10 - 35% (w/w) 0.59 (Air = 1) @ 27 - 30% (w/w)
Relative Density	: 0.895 (Water = 1) @ 30% (w/w) 1.9 @ 10 - 35% (w/w). 0.9 @ 27 - 30% (w/w) 0.898 @ 28% (w/w). 0.8974 @ 29.4% (w/w)
Specific Gravity	: 0.895 g/cm ³
Solubility	: Water: Miscible
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Ammonium hydroxide reacts with many heavy metals and their salts forming explosive compounds. It attacks many metals forming flammable/explosive gas. The solution in water is a strong base, it reacts violently with acids.

Chemical Stability: Stable at standard temperature and pressure.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Keep away from heat. Avoid ignition sources. Extremely high or low temperatures and incompatible materials.

Incompatible Materials: Oxidizers. Avoid contact with: Halogens (F, Cl, Br, I). Gold, silver, mercury. Hypochlorites. Copper and its alloys. Aluminum alloys. Galvanized surfaces. May form shock sensitive compounds that may explode when dry.

Hazardous Decomposition Products: Under conditions of fire this material may produce: Ammonia. Nitrogen oxides.

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:

Aqua Ammonia (1336-21-6)	
ATE (Oral)	1,000.00 mg/kg body weight

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

pH: 13 @ 10%/ 11.6 @ 1N.

Eye Damage/Irritation: Causes serious eye damage.

pH: 13 @ 10%/ 11.6 @ 1N.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

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Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Aspiration Hazard: Not classified

Symptoms/Effects After Inhalation: Contact may cause immediate severe irritation progressing quickly to chemical burns. Danger of serious damage to health by prolonged exposure through inhalation. May cause pulmonary edema. Symptoms may be delayed.

Symptoms/Effects After Skin Contact: Causes severe skin burns. Redness. Pain. Serious skin burns. Blisters.

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

Symptoms/Effects After Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Swallowing a small quantity of this material will result in serious health hazard.

Chronic Symptoms: Repeated or prolonged inhalation may damage lungs. Prolonged and repeated contact will eventually cause permanent tissue damage. Repeated or prolonged exposure may damage kidneys.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Ammonium hydroxide (1336-21-6)	
LD50 Oral Rat	350 mg/kg
Water (7732-18-5)	
LD50 Oral Rat	> 90000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Very toxic to aquatic life.

Ammonium hydroxide (1336-21-6)	
LC50 Fish 1	8.2 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	0.66 mg/l (Exposure time: 48 h - Species: water flea)
EC50 Daphnia 2	0.66 mg/l (Exposure time: 48 h - Species: Daphnia pulex)

Persistence and Degradability

Aqua Ammonia (1336-21-6)	
Persistence and Degradability	Product is biodegradable.

Bioaccumulative Potential

Aqua Ammonia (1336-21-6)	
Bioaccumulative Potential	Not expected to bioaccumulate.

Mobility in Soil Not available

Other Adverse Effects Not available

SECTION 13: DISPOSAL CONSIDERATIONS

Sewage Disposal Recommendations: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

*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

TRANSPORTATION CLASSIFICATION	DOT	TDG	IMDG	IATA
Identification Number	UN2672	UN2672	UN2672	UN2672
Proper Shipping Name	AMMONIA SOLUTIONS (relative density between 0.880 and 0.957 at 15 degrees C	AMMONIA SOLUTION (relative density between 0.880 and 0.957 at 15 °C in water,	AMMONIA SOLUTION (relative density between 0.880 and 0.957 at 15 degrees C	AMMONIA SOLUTION

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	in water, with more than 10 percent but not more than 35 percent ammonia)	with more than 10 percent but not more than 35 percent ammonia)	in water, with more than 10 percent but not more than 35 percent ammonia)	
Transport Hazard Class(es)	8	8	8	8
				
Packing Group	III	III	III	III
Environmental Hazards	Marine Pollutant : Yes*	Marine Pollutant : Yes**	Marine Pollutant : Yes	Marine Pollutant: N/A
Emergency Response	ERG Number : 125	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
Ammonium hydroxide (1336-21-6)	1000 lb	Not applicable	Not applicable	No

SARA 311/312

Aqua Ammonia (1336-21-6)
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
Ammonium hydroxide (1336-21-6)	No	No	No	No

State Right-To-Know Lists

Ammonium hydroxide (1336-21-6)
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

Ammonium hydroxide (1336-21-6)
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
Ammonium hydroxide (1336-21-6)	Yes	Yes	Yes	Yes	No	No	No	Yes
Chemical Name (CAS No.)	China IECS	Japan ENCS	Japan ISHL	Japan PDSCL	Japan PRTR	Philippines PICCS	New Zealand NZIOC	US TSCA

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Ammonium hydroxide (1336-21-6)	Yes	Yes	No	Yes	No	Yes	Yes	Yes
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SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 05/14/2018

Revision Summary

Section	Change	Date Changed
3	HPR Statement	05/14/2018

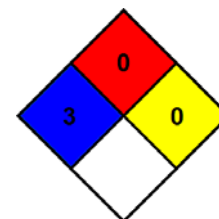
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H335	May cause respiratory irritation
H400	Very toxic to aquatic life

NFPA 704

NFPA Health Hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.
NFPA Fire Hazard : 0 - Materials that will not burn under typical dire conditions.
NFPA Reactivity Hazard : 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Flammability : 0 Minimal Hazard
Physical : 0 Minimal Hazard
PPE See Section 8

Abbreviations and Acronyms

AICS - Australian Inventory of Chemical Substances	LC50 - Median Lethal Concentration
ACGIH - American Conference of Governmental Industrial Hygienists	LD50 - Median Lethal Dose
AIHA - American Industrial Hygiene Association	LOAEL - Lowest Observed Adverse Effect Level
ATE - Acute Toxicity Estimate	LOEC - Lowest-observed-effect Concentration
BCF - Bioconcentration factor	Log Pow - Octanol/water Partition Coefficient
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
	PRTR - Japan Pollutant Release and Transfer Register

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



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