

SAFETY DATA SHEET

Issue Date 07-Oct-2018 Revision Date 08-Oct-2018 Version 1.2

1. Identification

Product identifier

Product Name Ammonia ISA Solution

Other means of identification

Product Code(s) 2824349

Recommended use of the chemical and restrictions on use

Recommended Use Standard solution.

Details of the supplier of the safety data sheet

Manufacturer Address

Hach Company P.O.Box 389 Loveland, CO 80539 USA +1(970) 669-3050

Emergency telephone number

Emergency Telephone +1(303) 623-5716 - 24 Hour Service +1(515)232-2533 - 8am - 4pm CST

2. Hazards identification

Classification

Acute toxicity - Oral	Category 4 - (H302)
Skin corrosion/irritation	Category 1 Sub-category A - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Acute aquatic toxicity	Category 3 - (H402)
Chronic aquatic toxicity	Category 3 - (H412)

Label elements

Signal word - Danger

Hazard statements

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H412 - Harmful to aquatic life with long lasting effects



Exclamation mark Corrosion

Precautionary statements

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]

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

P310 - Immediately call a POISON CENTER or doctor

P363 - Wash contaminated clothing before reuse

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

P273 - Avoid release to the environment

P270 - Do not eat, drink or smoke when using this product

Other Hazards Known

Not applicable

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Synonyms	Percent Range
Lithium hydroxide monohydrate	1310-66-3	No information available	10 - 20%
Disodium EDTA	139-33-3	No information available	1 - 5%
Thymolphthalein	125-20-2	Phenolphthalein,	<0.1%
		5',5"-diisopropyl-2',2"-dimet	
		hyl-	

4. First aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

advice/attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing. Get immediate medical advice/attention.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get immediate medical advice/attention.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person. Get immediate medical

advice/attention.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation.

Indication of any immediate medical attention and special treatment needed

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. Fire-fighting measures

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition

can lead to release of irritating gases and vapors.

Hazardous combustion products This material will not burn.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective actions for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Ensure adequate

ventilation. Use personal protective equipment as required. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated

clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach

of children. Protect from moisture. Store locked up. Store away from other materials.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Face protection shield.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Respiratory protectionNo protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state

Liquid

Appearance

Property

aqueous solution

Color blue

Odor Odorless Odor threshold Not applicable

No data available Molecular weight

pН

No data available

Values

Melting point/freezing point

~ -20 °C / -4 °F

Estimation based on theoretical

Remarks • Method

calculation

~ 106 °C / 223 °F Boiling point / boiling range

Estimation based on theoretical calculation

Evaporation rate 0.99 (water = 1) Estimation based on theoretical

calculation

Vapor pressure

21.677 mm Hg / 2.89 kPa at 25 °C / 77 °F

Estimation based on theoretical

calculation

Vapor density (air = 1)

0.62 (air = 1)

Specific gravity (water = 1 / air = 1)

No data available

Partition Coefficient (n-octanol/water)

Not applicable

Soil Organic Carbon-Water Partition Coefficient

Not applicable

Autoignition temperature

No data available

Decomposition temperature

No data available

Dynamic viscosity

No data available

Kinematic viscosity

No data available

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

Chemical Name	Solubility classification	<u>Solubility</u>	Solubility Temperature	
Acid	Violent reaction will occur	No data available	25 °C / 77 °F	

Other Information

Metal Corrosivity

Steel Corrosion Rate No data available **Aluminum Corrosion Rate** No data available

Volatile Organic Compounds (VOC) Content

Chemical name	CAS No.	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Lithium hydroxide monohydrate	1310-66-3	No data available	•
Disodium EDTA	139-33-3	No data available	-
Thymolphthalein	125-20-2	No data available	-

Explosive properties

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point No data available

Flammability Limit in Air

Upper flammability limitNo data availableLower flammability limitNo data available

Oxidizing properties No data available.

Bulk density

No data available

Particle Size No information available

Particle Size Distribution No information available

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to avoid Exposure to air or moisture over prolonged periods.

Incompatible materials Acids. Bases. Oxidizing agent.

Hazardous Decomposition Products None known based on information supplied.

11. Toxicological information

Information on Likely Routes of Exposure

Inhalation Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking,

headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs.

Pulmonary edema can be fatal.

Eye contact Causes burns. Corrosive to the eyes and may cause severe damage including blindness.

Causes serious eye damage. May cause irreversible damage to eyes.

Skin contact Corrosive. Causes severe burns. Avoid contact with skin and clothing.

Ingestion Causes burns. Ingestion causes burns of the upper digestive and respiratory tracts. May

cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the

mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing.

Acute toxicity

Aggravated Medical Conditions Eye disorders. Skin disorders. Respiratory disorders.

Toxicologically synergistic None known.

products

Toxicokinetics, metabolism and See ingredients information below.

distribution

Chemical name	Toxicokinetics, metabolism and distribution
Disodium EDTA	EDTA and related compounds are poorly absorbed by the digestive system.
(1 - 5%)	
CAS#: 139-33-3	

Product Acute Toxicity Data

Oral Exposure Route

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

No data available

No data available

No data available

No data available

Numerical measures of toxicity

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

Acute Toxicity Estimations (ATE)

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) No information available
ATEmix (dermal) No information available

ATEmix (inhalation-dust/mist) 5.33 mg/l

ATEmix (inhalation-vapor) No information available ATEmix (inhalation-gas) No information available

Ingredient Acute Toxicity Data

Oral Exposure Route If available, see data below

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
Lithium hydroxide	Rat	225 mg/kg	None		IUCLID (The International
monohydrate	LD ₅₀		reported		Uniform Chemical Information
(10 - 20%)			-		Database)
CAS#: 1310-66-3					,
Disodium EDTA	Rat	2000 mg/kg	None		RTECS (Registry of Toxic
(1 - 5%)	LD ₅₀		reported		Effects of Chemical
CAS#: 139-33-3			-		Substances)

Dermal Exposure Route

If available, see data below
Inhalation (Dust/Mist) Exposure Route

If available, see data below

Chemical name Endpoint Reported Exposure Toxicological effects Key literature references and

	type	dose	time		sources for data
Lithium hydroxide monohydrate (10 - 20%) CAS#: 1310-66-3	Rat LC ₅₀	0.96 mg/L	4 hours	None reported	IUCLID (The International Uniform Chemical Information Database)

Inhalation (Vapor) Exposure RouteIf available, see data belowInhalation (Gas) Exposure RouteIf available, see data below

Product Specific Target Organ Toxicity Single Exposure Data

Oral Exposure Route

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

No data available

No data available

No data available

No data available

Ingredient Specific Target Organ Toxicity Single Exposure Data

Oral Exposure Route
Dermal Exposure Route
If available, see data below
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route
If available, see data below

Aspiration toxicity

No data available

Product Skin Corrosion/Irritation Data

No data available.

Ingredient Skin Corrosion/Irritation Data

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Lithium hydroxide monohydrate (10 - 20%) CAS#: 1310-66-3	Existing human experience	Human	None reported	None reported	Corrosive to skin	ERMA (New Zealands Environmental Risk Management Authority)
Disodium EDTA (1 - 5%) CAS#: 139-33-3	Standard Draize Test	Rabbit	500 mg	20 hours	Not corrosive or irritating to skin	ECHA (The European Chemicals Agency)
Thymolphthalein (<0.1%) CAS#: 125-20-2	QSAR (Quantitative Structure Activity Relationship Models)	None reported	None reported	None reported	Not corrosive or irritating to skin	Toxtree (Ideaconsult, Ltd)

Product Serious Eye Damage/Eye Irritation Data

No data available.

Ingredient Eye Damage/Eye Irritation Data

If available, see data below

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Disodium EDTA (1 - 5%) CAS#: 139-33-3	Standard Draize Test	Rabbit	50 mg	None reported	Mild eye irritant	ECHA (The European Chemicals Agency)
Thymolphthalein (<0.1%) CAS#: 125-20-2	QSAR (Quantitative Structure Activity Relationship Models)	None reported	None reported	None reported	Not corrosive or irritating to eyes	Toxtree (Ideaconsult, Ltd)

Sensitization Information

Product Sensitization Data

Skin Sensitization Exposure RouteNo data available.Respiratory Sensitization Exposure RouteNo data available.

Ingredient Sensitization Data

Skin Sensitization Exposure Route If available, see data below. Respiratory Sensitization Exposure Route If available, see data below.

Chronic Toxicity Information

Product Specific Target Organ Toxicity Repeat Dose Data

Oral Exposure Route

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

No data available.

No data available.

No data available.

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Oral Exposure Route
Dermal Exposure Route
If available, see data below
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route
If available, see data below

Product Carcinogenicity Data

Oral Exposure RouteNo data availableDermal Exposure RouteNo data availableInhalation (Dust/Mist) Exposure RouteNo data availableInhalation (Vapor) Exposure RouteNo data availableInhalation (Gas) Exposure RouteNo data available

Ingredient Carcinogenicity Data

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Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA	Mexico	
Lithium hydroxide monohydrate	1310-66-3	-	-	-	-	-	
Disodium EDTA	139-33-3	-	-	-	-	-	
Thymolphthalein	125-20-2	-	-	-	-	-	

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of	Does not apply
Labor)	

Oral Exposure Route
Dermal Exposure Route
If available, see data below
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route
If available, see data below

Product Germ Cell Mutagenicity invitro Data

No data available.

Ingredient Germ Cell Mutagenicity invitro Data

If available, see data below

Chemical name Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and
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						sources for data
Disodium EDTA	Cytogenetic	Hamster lung	200 mg/L	None	Positive test result for	RTECS (Registry
(1 - 5%)	analysis			reported	mutagenicity	of Toxic Effects of
CAS#: 139-33-3						Chemical
						Substances)

Product Germ Cell Mutagenicity invivo Data

Oral Exposure RouteNo data availableDermal Exposure RouteNo data availableInhalation (Dust/Mist) Exposure RouteNo data availableInhalation (Vapor) Exposure RouteNo data availableInhalation (Gas) Exposure RouteNo data available

Ingredient Germ Cell Mutagenicity invivo Data

Oral Exposure Route

Dermal Exposure Route

If available, see data below

Product Reproductive Toxicity Data

Oral Exposure Route

Dermal Exposure Route

Inhalation (Dust/Mist) Exposure Route

Inhalation (Vapor) Exposure Route

Inhalation (Gas) Exposure Route

No data available

No data available

No data available

No data available

Ingredient Reproductive Toxicity Data

Oral Exposure Route
Dermal Exposure Route
If available, see data below
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route
If available, see data below

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Product Ecological Data
Aquatic toxicity

FishNo data availableCrustaceaNo data availableAlgaeNo data available

Ingredient Ecological Data

Aquatic toxicity

Fish If available, see ingredient data below

Chemical name	Exposure	Species	Endpoint	Reported	Key literature references and
	time		type	dose	sources for data
Disodium EDTA (1 - 5%) CAS#: 139-33-3	96 hours	Lepomis macrochirus	LC ₅₀	159 mg/L	Vendor SDS
Thymolphthalein (<0.1%) CAS#: 125-20-2	None reported	None reported	LC ₅₀	0.022 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite TM

	Chamical name	Evnacura	Charles	Endnoint		Vay lit
Crustacea			If av	/ailable. see i	naredient data l	pelow

Chemical name	Exposure	Species	Endpoint	Reported	Key literature references and
	time	-	type	dose	sources for data

Thymolphthalein	None	None reported	EC ₅₀	0.023 mg/L	Estimation through ECOSARS
(<0.1%)	reported			_	v1.11 part of the Estimation
CAS#: 125-20-2					Programs Interface (EPI)
					Suite™

If available, see ingredient data below Algae

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Disodium EDTA (1 - 5%) CAS#: 139-33-3	72 Hours	None reported	EC ₅₀	10 mg/L	Vendor SDS
Thymolphthalein (<0.1%) CAS#: 125-20-2	None reported	None reported	EC ₅₀	0.175 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

Other Information

Persistence and degradability

Product Biodegradability Data No data available.

Ingredient Biodegradability Data

Chemical name	Test method	Biodegradation	Exposure	Results
			time	
Thymolphthalein	OECD Test No. 303: Simulation Test - Aerobic Sewage	None reported	None	Not readily
(<0.1%)	Treatment A: Activated Sludge Units; B: Biofilms		reported	biodegradable
CAS#: 125-20-2				

Bioaccumulation

Product Bioaccumulation Data

No data available.

Partition Coefficient (n-octanol/water) **Ingredient Bioaccumulation Data**

Not applicable

Chemical name	Test method	Exposure time	Species	Bioconcentrat ion factor (BCF)	Results
Thymolphthalein	Estimation through BCFBAF	None	None reported	BCF =	Has the
(<0.1%)	v3.01 part of the Estimation	reported		12302.68771	potential to
CAS#: 125-20-2	Programs Interface (EPI)				bioaccumula
	Suite™				te

Mobility

Soil Organic Carbon-Water Partition Coefficient

Not applicable

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

Other adverse effects

Contains a substance with an endocrine-disrupting potential.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transportation information

Not regulated MEX

Note: No special precautions necessary.

TDG

UN/ID no UN2679

Lithium Hydroxide, Solution Proper shipping name

Hazard Class Ш **Packing Group**

U.S. DOT

UN/ID no UN2679

Proper shipping name Lithium Hydroxide, Solution

Hazard Class Packing Group Ш **Emergency Response Guide** 154

Number

ICAO (air) Not regulated

IATA

UN/ID no UN2679 **Hazard Class Packing Group** Ш **ERG Code** 154

IMDG

UN/ID no UN2679 **Hazard Class Packing Group** Ш

RID Not regulated

ADR

UN/ID no UN2679

Proper shipping name Lithium Hydroxide, Solution

Hazard Class Packing Group Ш

ADN Not regulated

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA Complies.
DSL/NDSL Complies.
EINECS/ELINCS Complies.

ENCS Contact supplier for inventory compliance status.

IECSCComplies.KECLComplies.PICCSComplies.AICSComplies.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

16. Other information

NFPA Health hazards 3 Flammability 0 Instability 0 Physical and chemical

properties -

HMIS Health hazards 3 Flammability 0 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value SKN* Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Prepared By Hach Product Compliance Department.

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Revision Note None

NOM-018-STPS-2015

The information is believed to be accurate, but it is not exhaustive and must be used only as guidance. It is based on the current state of knowledge of the chemical substance or mixture and is applicable to the appropriate safety precautions for the product.

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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End of Safety Data Sheet