

SAFETY DATA SHEET

Issue Date 05-Oct-2016 Revision Date 01-Dec-2016 Version 4 Page 1 / 17

1. IDENTIFICATION

Product identifier

Product Name Ammonia Cyanurate

Other means of identification

Product Code(s) 2653199

Safety data sheet number M00128

UN/ID no UN2680

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory Use. Reagent for ammonia test.

Uses advised against None. Restrictions on use None.

Details of the supplier of the safety data sheet

Manufacturer Address

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

Emergency telephone number

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

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Corrosive to metals	Category 1
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word - Danger

Product Name Ammonia Cyanurate Revision Date 01-Dec-2016 Page 2 / 17



Hazard statements

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H412 - Harmful to aquatic life with long lasting effects

Precautionary statements

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

P264 - Wash face, hands and any exposed skin thoroughly after handling

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

P234 - Keep only in original container

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

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

P363 - Wash contaminated clothing before reuse

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

P310 - Immediately call a POISON CENTER or doctor/physician

P390 - Absorb spillage to prevent material damage

P405 - Store locked up

P406 - Store in corrosive resistant stainless steel container with a resistant inliner

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

Other Information

Harmful to aquatic life
May be harmful in contact with skin

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Percent ranges are used where confidential product information is applicable.

Chemical Name	CAS No	Percent Range	HMRIC #
Lithium hydroxide monohydrate	1310-66-3	1 - 5%	-
Dichloroisocyanuric acid, sodium salt	2893-78-9	1 - 5%	-

Product Name Ammonia Cyanurate Revision Date 01-Dec-2016 Page 3 / 17

4. FIRST AID MEASURES

Description of first aid measures

General advice See section 8 for PPE that may be required during handling. Do not breathe

dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If no local exhaust use approved fume hood and/or respirator. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. Remove from exposure, lie down. Immediate medical attention is required. IF IN EYES: Flush eyes

for at least 15 minutes. IF ON SKIN (or hair): Remove/Take off immediately all

contaminated clothing. Rinse skin with water/shower.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Call a physician immediately.

Skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. Call a physician immediately.

Inhalation IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a

physician immediately.

Ingestion IF SWALLOWED: Rinse Mouth. Do NOT induce vomiting. Call a physician immediately.

Self-protection of the first aider First aider: Pay attention to self-protection. Use personal protective equipment as required.

Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. 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.

Most important symptoms and effects, both acute and delayed

Symptoms See Section 11: TOXICOLOGICAL INFORMATION.

Indication of any immediate medical attention and special treatment needed

Note to physiciansTreat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical. Carbon dioxide. Water.

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

Flammable properties

During a fire, irritating and highly toxic gases may be generated by thermal decomposition. Not classified as flammable according to GHS criteria.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Hazardous combustion products

May emit toxic and corrosive fumes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Product Name Ammonia Cyanurate **Revision Date** 01-Dec-2016

Page 4/17

6. ACCIDENTAL RELEASE MEASURES

U.S. NoticeOnly persons properly qualified to respond to an emergency involving hazardous

substances may respond to a spill according to federal regulations (OSHA 29 CFR

1910.120(a)(v)) and per your company's emergency response plan and

guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations

should respond to a spill involving chemicals.

EC NoticeOnly persons properly qualified to respond to an emergency involving hazardous

substances should respond to a spill involving chemicals. See Section 13, Special

Instructions for disposal assistance.

WHMIS Notice Only persons properly qualified to respond to an emergency involving hazardous

substances should respond to a spill involving chemicals. See Section 13, Special

Instructions for disposal assistance.

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Do not touch or walk through spilled material. Ventilate

affected area. Use personal protective equipment as required.

Environmental precautions

Environmental precautionsDo not allow into any sewer, on the ground or into any body of water. Should not be

released into the environment. Prevent further leakage or spillage if safe to do so. Prevent

product from entering drains. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Cover with plastic sheet to prevent

spreading.

Methods for cleaning up

Take necessary precautions in observance of pertinent physical hazards. Take up

154

mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Dispose of in accordance with local, state and federal regulations or laws.

Emergency Response Guide Number

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Absorb spillage to prevent material damage.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep out of the reach of children. Keep containers tightly closed in a dry, cool and

well-ventilated place. Keep in properly labeled containers. Keep/store only in original

container.

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Product Name Ammonia Cyanurate Revision Date 01-Dec-2016 Page 5 / 17

Chemical Name	Northwest Territories OEL	Nova Scotia OEL	Nunavut OEL	Ontario TWA	Prince Edward Island OEL
Lithium hydroxide monohydrate 1 - 5%	NDF	NDF	NDF	STEL: 1 mg/m ³	NDF

Legend See section 16 for terms and abbreviations

Appropriate engineering controls

Engineering Controls If no local exhaust use approved fume hood or self-contained breathing apparatus

If no local exhaust use approved fume hood and/or respirator

Showers

Eyewash stations

Individual protection measures, such as personal protective equipment

Eye/face protection Wear tight sealing safety goggles and/or face protection shield. Avoid contact with eyes.

Skin and body protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls,

as appropriate, to prevent skin contact.

Respiratory protection Do not breathe gas/fumes/vapor/spray. If no local exhaust use approved fume hood and/or

respirator. In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations Avoid breathing (dust, vapor, mist, gas). Avoid contact with skin, eyes or clothing. Use

personal protective equipment as required. Wear suitable gloves and eye/face protection. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Regular cleaning of equipment, work area and clothing is recommended. Handle in accordance with good industrial hygiene and safety practice. Avoid prolonged or repeated

contact with skin. Take off all contaminated clothing and wash it before reuse.

Environmental exposure controls

Avoid creating dust. Do not allow into any sewer, on the ground or into any body of water. Local authorities should be advised if significant spillages cannot be contained.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Solid

Gas Under Pressure Not classified according to GHS criteria

Appearance powder Color white

Odor Chlorine Odor threshold No data available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Molecular weight No data available

pH 12.33 5% Solution

Melting point/freezing point > 240 °C / 464 °F

Product Name Ammonia Cyanurate **Revision Date** 01-Dec-2016

Page 6/17

Boiling point / boiling range No data available

Evaporation rate Not applicable

Vapor pressure 0.375 mm Hg / 0.05 kPa at 20 °C / 68 °F Estimation based on theoretical

calculation

Vapor density (air = 1) Not applicable NaN (air = 1)

Specific gravity (water = 1 / air = 1) 1.783

Partition Coefficient (n-octanol/water) Not applicable

Soil Organic Carbon-Water Partition

Coefficient

Not applicable

No data available

Autoignition temperature No data available

Decomposition temperature No data available

Dynamic viscosity Not applicable

Kinematic viscosity Not applicable

Solubility(ies)

Water solubility

Water solubility classification	Water solubility_	Water Solubility Temperature	
Soluble	No data available	25 °C / 77 °F	

Solubility in other solvents

Chemical Name	Solubility classification	Solubility	Solubility Temperature	
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F	

Other Information

Metal Corrosivity Classified as corrosive to metal according to GHS criteria

GHS Metal Corrosivity Classification Category 1, H290

Steel Corrosion Rate 0 mm/yr / 0 in/yr

Aluminum Corrosion Rate 20.4 mm/yr / 0.8 in/yr

Volatile Organic Compounds (VOC) Content Not applicable.

Bulk density Not applicable

Explosive propertiesNot classified according to GHS criteria.

Explosion data No data available

Upper explosion limit No data available

Lower explosion limit No data available

Flammable properties During a fire, irritating and highly toxic gases may be generated

by thermal decomposition. Not classified as flammable according

Product Code(s) 2653199 Issue Date 05-Oct-2016

Version 4

Product Name Ammonia Cyanurate **Revision Date** 01-Dec-2016

Page 7 / 17

to GHS criteria.

Flammability Limit in Air

Upper flammability limit: No data available

Lower flammability limit: No data available

Flash point Not applicable

Method No information available

Oxidizing properties Not classified according to GHS criteria.

Reactivity propeties Not classified as self-reactive, pyrophoric, self-heating or emitting

flammable gases in contact with water according to GHS criteria.

10. STABILITY AND REACTIVITY

Reactivity propeties

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria

Chemical stability

Stable under recommended storage conditions.

Special dangers of the product

None reported

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Extremes of temperature and direct sunlight. Incompatible materials.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosive properties

Not classified according to GHS criteria.

Upper explosion limit No data available

Lower explosion limit No data available

Autoignition temperature

No data available

Sensitivity to Static Discharge

None reported

Sensitivity to Mechanical Impact

Product Name Ammonia Cyanurate **Revision Date** 01-Dec-2016 **Page** 8 / 17

None reported

11. TOXICOLOGICAL INFORMATION

NIOSH (RTECS) Number

None reported

Information on Likely Routes of Exposure

Product Information	Corrosive to skin. Corrosive to eyes. May be harmful if
	swallowed.
Inhalation	Causes burns. Corrosive by inhalation.
Eye contact	Corrosive to the eyes and may cause severe damage including
	blindness. Causes burns. Corrosive to eyes.
Skin contact	Cause severe skin burns and eye damage. Causes burns.
Ingestion	Ingestion causes burns of the upper digestive and respiratory
	tracts. May be harmful if swallowed. Causes burns.
Aggravated Medical Conditions	Eye disorders. Skin disorders. Respiratory disorders.
Toxicologically synergistic products	None known.
Toxicokinetics, metabolism and distribution	See ingredients information below.

Product Acute Toxicity Data

Test data reported below

Oral Exposure Route

Endpoint type	Reported dose	Key literature references and sources for data
Rat	3613 mg/kg	Outside testing
LD ₅₀		

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

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

ATEmix (inhalation-dust/mist) 39.34 mg/L

Ingredient Acute Toxicity Data

Oral Exposure Route If available, see data below

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Lithium hydroxide monohydrate (1 - 5%) CAS#: 1310-66-3	Rat LD ₅₀	225 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
Dichloroisocyanuric acid, sodium salt (1 - 5%) CAS#: 2893-78-9	Rat LD₅o	750 mg/kg	None reported	None reported	ERMA (New Zealands Environmental Risk Management Authority) HSDB (Hazardous Substances Data Bank)

Dermal Exposure Route If available, see data below

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Dichloroisocyanuric	Rabbit	> 10000	None	None reported	No information available

Product Name Ammonia Cyanurate Revision Date 01-Dec-2016

Page 9/17

acid, sodium salt	LD ₅₀	mg/kg	reported	
(1 - 5%)				
CAS#: 2893-78-9				

Inhalation (Dust/Mist) Exposure Route

If available, see data below

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Lithium hydroxide monohydrate (1 - 5%) CAS#: 1310-66-3	Rat LC ₅₀	0.96 mg/L	4 hours	None reported	IUCLID (The International Uniform Chemical Information Database)
Dichloroisocyanuric acid, sodium salt (1 - 5%) CAS#: 2893-78-9	Rat LC₅o	12.5 mg/L	4 hours	None reported	IUCLID (The International Uniform Chemical Information Database)

Inhalation (Vapor) Exposure Route

No data available

Inhalation (Gas) Exposure Route

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 (1 - 5%) CAS#: 1310-66-3	Existing human experience	Human	None reported	None reported	Corrosive to skin	ERMA (New Zealands Environmental Risk Management Authority)
Dichloroisocyanuric acid, sodium salt (1 - 5%) CAS#: 2893-78-9	Standard Draize Test	Rabbit	500 mg	24 hours	Mild skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

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
Dichloroisocyanuric acid, sodium salt (1 - 5%) CAS#: 2893-78-9	Rinse Test	Rabbit	None reported	None reported	Eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

Sensitization Information

Product Sensitization Data

Skin Sensitization Exposure Route No data available.

Respiratory Sensitization Exposure Route

No data available.

Product Name Ammonia Cyanurate Revision Date 01-Dec-2016

Page 10 / 17

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 Repeat Dose Toxicity Data

Oral Exposure Route No data available.

Dermal Exposure RouteNo data available.

Inhalation (Dust/Mist) Exposure Route No data available.

Inhalation (Vapor) Exposure Route No data available.

Inhalation (Gas) Exposure Route No data available.

Ingredient Repeat Dose Toxicity Data

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Chemical Name	CAS No	ACGIH	IARC	NTP	OSHA
Lithium hydroxide monohydrate	1310-66-3	-	-	-	-
Dichloroisocyanuric acid, sodium salt	2893-78-9	-	-	-	-

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)	

<u>Product Carcinogenicity Data</u>

No data available

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route

No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Ingredient Carcinogenicity Data

Product Name Ammonia Cyanurate **Revision Date** 01-Dec-2016

Page 11 / 17

Oral Exposure Route If available, see data below

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Product Germ Cell Mutagenicity invitro Data

No data available.

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Ingredient Germ Cell Mutagenicity invivo Data

Oral Exposure Route No data available

Dermal Exposure RouteNo data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Ingredient Reproductive Toxicity Data

Oral Exposure Route If available, see data below

				,	
Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Dichloroisocyanuric acid, sodium salt (1 - 5%) CAS#: 2893-78-9		4000 mg/kg	9 days	Effects on Newborn Growth statistics (e.g. % reduced weight gain) Physical Specific Developmental Abnormalities	RTECS (Registry of Toxic Effects of Chemical Substances)
	ĺ	1		Musculoskeletal system	I

Product Name Ammonia Cyanurate **Revision Date** 01-Dec-2016

Page 12 / 17

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity Harmful to aquatic life.

Product Ecological Data

Aquatic toxicity

Fish No data available

Crustacea No data available

Algae No data available

Terrestrial toxicity

Soil No data available

Vertebrates No data available

Invertebrates No data available

Ingredient Ecological Data

Aquatic toxicity

Fish If available, see ingredient data below

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Dichloroisocyanuric acid, sodium salt (1 - 5%) CAS#: 2893-78-9	96 hours	Oncorhynchus mykiss	LC ₅₀	0.25 mg/L	PEEN (Pan European Ecological Network)

<u>Crustacea</u> If available, see ingredient data below

Chemical Name	Exposure	Species	Endpoint	Reported	Key literature references and
	time		type	dose	sources for data
Dichloroisocyanuric acid, sodium salt (1 - 5%) CAS#: 2893-78-9	48 Hours	Daphnia magna	LC50	J	ECHA (The European Chemicals Agency) PEEN (Pan European Ecological Network)

Algae If available, see ingredient data below

Terrestrial toxicity

SoilNo data availableVertebratesNo data availableInvertebratesNo data available

Product Name Ammonia Cyanurate Revision Date 01-Dec-2016 Page 13 / 17

Other Information

Persistence and degradability

None known.

Product Biodegradability Data

If available, see ingredient data below.

Ingredient Biodegradability Data

Test data reported below

Chemical Name	Test method	Biodegradation	Exposure time	Results
Butanedioic acid, 2,3-dihydroxy-[R-(R*, R*)]-, disodium salt (7 - 13%) CAS#: 868-18-8	None reported	73%	14 days	Readily biodegradable

Bioaccumulation

None known.

Product Bioaccumulation Data

No data available.

Ingredient Bioaccumulation Data

No data available

Additional information

Product Information

Partition Coefficient (n-octanol/water)

Not applicable

Ingredient Information

Chemical Name	Partition Coefficient (n-octanol/water)	Method
Dichloroisocyanuric acid, sodium salt	$log K_{ow} = -0.06$	Estimation through KOWWIN v1.68 part
(1 - 5%)		of the Estimation Programs Interface
CAS#: 2893-78-9		(EPI) Suite™

Mobility

Mobility in soil: High mobility. If available, see ingredient data below.

Product Information

Soil Organic Carbon-Water Partition Coefficient

Not applicable

Ingredient Information

Additional information

Water solubility

Product Information

Product Name Ammonia Cyanurate Revision Date 01-Dec-2016

Page 14 / 17

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	No data available	25 °C / 77 °F

Ingredient Information

Chemical Name	Water solubility classification	Water solubility	Water solubility temperature °C	Water solubility temperature °F
Lithium hydroxide monohydrate CAS#: 1310-66-3	Completely soluble	128000 mg/L	20 °C	68 °F
Dichloroisocyanuric acid, sodium salt CAS#: 2893-78-9	Completely soluble	227000 mg/L	25 °C	77 °F

Other adverse effects

No information available.

Chemical Name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Dichloroisocyanuric acid, sodium salt (1 - 5%)	Group III Chemical	-	-
CAS#: 2893-78-9			

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national, and local laws and

regulations.

Contaminated packaging Do not reuse container.

D002 **US EPA Waste Number**

Special instructions for disposal Dilute to 3 to 5 times the volume with cold water. Adjust to a pH between 6 and 9 with an

acid, such as sulfuric or citric. Open cold water tap completely, slowly pour the reacted

material to the drain. Flush system with plenty of water.

14. TRANSPORT INFORMATION

U.S. DOT

UN/ID no UN2680

Proper shipping name Lithium Hydroxide Mixture

Hazard Class Packing Group

Marine pollutant This product contains a chemical which is listed as a marine pollutant according to DOT.

Emergency Response Guide 154

Number

TDG UN/ID no UN2680

Hazard Class Packing Group

Marine pollutant This product contains a chemical which is listed as a severe marine pollutant according to

TDG.

IATA

UN/ID no UN2680

Proper shipping name Lithium Hydroxide Mixture

Product Name Ammonia Cyanurate Revision Date 01-Dec-2016

Page 15 / 17

Hazard Class 8
Packing Group II
ERG Code 154

IMDG

UN/ID no UN2680

Proper shipping name Lithium Hydroxide Mixture

Hazard Class 8
Packing Group ||

Note: No special precautions necessary.

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

National Inventories

TSCA Complies DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

EINECS/ELINCS Complies **ENCS** Complies Complies **IECSC** Complies KECL Complies **PICCS** TCSI Complies **AICS** Complies Complies **NZIoC**

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

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Product Name Ammonia Cyanurate Revision Date 01-Dec-2016 Page 16 / 17

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Lithium hydroxide monohydrate	X	-	-
1310-66-3			
Dichloroisocyanuric acid,	Χ	-	X
sodium salt			
2893-78-9			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Special Comments

None

Additional information

Global Automotive Declarable Substance List (GADSL)

Chemical Name	Global Automotive Declarable Substance List Classifications	Global Automotive Declarable Substance List Thersholds
Dichloroisocyanuric acid, sodium salt	Declarable Substance (LR)	0.0 %
2893-78-9	Prohibited Substance (LR)	

NFPA and HMIS Classifications

ſ	NFPA	Health hazards - 3	Flammability - 0	Instability - 0	Physical and Chemical
1					Properties -
ſ	HMIS	Health hazards - 3	Flammability - 0	Physical Hazards - 0	Personal protection - X
1					- See section 8 for more
L					information

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

NIOSH IDLH Immediately Dangerous to Life or Health
ACGIH (American Conference of Governmental Industrial Hygienists)

NDF no data

Product Name Ammonia Cyanurate **Revision Date** 01-Dec-2016

Page 17 / 17

<u>Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION</u>

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

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

X Listed Vacated These values have no official status. The only

binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state

regulations.

SKN* Skin designation SKN+ Skin sensitization
RSP+ Respiratory sensitization ** Hazard Designation
C Carcinogen R Reproductive toxicant

M mutagen

Prepared By Hach Product Compliance Department

Issue Date 05-Oct-2016

Revision Date 01-Dec-2016

Revision Note None

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.

HACH COMPANY©2017

End of Safety Data Sheet