SAFETY DATA SHEET

Issue Date 11-Apr-2016 **Revision Date** 05-Mar-2018 **Version** 1.1

1. IDENTIFICATION

Product identifier

Product Name Ammonia ULR TNT Reagent A

Other means of identification

Product Code(s) TNT830A

Safety data sheet number M01878

UN/ID no UN3077

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory reagent Determination of ammonium nitrogen

Uses advised against No information available

Details of the supplier of the safety data sheet

Initial Supplier Identifier
Hach Sales & Service LP. 3020 Gore Road, London, Ontario N5V 4T7 Canada Tel: 1-800-665-7635

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

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300
CANUTEC 613-992-4624

2. HAZARD IDENTIFICATION

Classification

Acute toxicity - Oral	Category 4 Sub-category A
Serious eye damage/eye irritation	Category 2
Chronic aquatic toxicity	Category 2

Label elements

Signal word - Warning

Hazard statements
H302 - Harmful if swallowed
H319 - Causes serious eye irritation

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements
P270 - Do not eat, drink or smoke when using this product
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
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]
P363 - Wash contaminated clothing before reuse
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P310 - Immediately call a POISON CENTER or doctor
P405 - Store locked up
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/attention
P273 - Avoid release to the environment
P391 - Collect spillage
P501 - Dispose of contents/ container to an approved waste disposal plant

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 oral 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)

Other Hazards Known
Causes mild skin irritation. Toxic to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance
Not applicable

Mixture

Chemical name	Synonyms	CAS No.	Percent Range	Units	HMIRA #
Sodium nitroferricyanide	No information available	14402-89-2	7 - 13%	g	-
Dichloroisocyanuric acid, sodium salt	No information available	2893-78-9	7 - 13%	g	-

4. FIRST AID MEASURES

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin contact Wash skin with soap and water.

Ingestion Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. 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

Note to physicians Treat symptomatically.

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 No information available.

Hazardous combustion products Chlorides. Sodium monoxide. Nitrogen oxides. Carbon monoxide, Carbon dioxide. Cyanide compounds.

Special protective equipment 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

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 Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

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

Environmental precautions

Environmental precautions 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.

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. Do not eat, drink or smoke when using this product.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick OEL	New Foundland & Labrador OEL
Sodium nitroferricyanide 7 - 13%	TWA: 1 mg/m³	TWA: 1 mg/m³ STEL: 2 mg/m³	TWA: 1 mg/m³	TWA: 1 mg/m³	TWA: 1 mg/m³

Chemical name	Northwest Territories OEL	Nova Scotia OEL	Nunavut OEL	Ontario TWA	Prince Edward Island OEL
Sodium nitroferricyanide 7 - 13%	TWA: 1 mg/m³ STEL: 3 mg/m³	TWA: 1 mg/m³	TWA: 1 mg/m³ STEL: 3 mg/m³	TWA: 1 mg/m³	TWA: 1 mg/m³

Chemical name	Quebec OEL	Saskatchewan OEL	Yukon OEL
Sodium nitroferricyanide 7 - 13%	TWA: 1.0 mg/m³ Ceiling: 10 ppm Ceiling: 11 mg/m³ SKN*	TWA: 1 mg/m³ STEL: 3 mg/m³	STEL: 2 mg/m³ STEL: 5 mg/m³ TWA: 1 mg/m³ TWA: 5 mg/m³ SKN*

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium nitroferricyanide 7 - 13%	TWA: 1 mg/m³	TWA: 5 mg/m³ (vacated) TWA: 1 mg/m³ (vacated) TWA: 5 mg/m³ *	IDLH: 25 mg/m³ CN TWA: 1 mg/m³ Fe

Legend See section 16 for terms and abbreviations

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Hand Protection	Wear suitable gloves.
Eye/face protection	If splashes are likely to occur, wear safety glasses with side-shields.
Skin and body protection	Wear suitable protective clothing.
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.
Environmental exposure controls	Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.
Thermal hazards	None under normal processing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid		
Appearance	pellets	**Color**	white
Odor	None	**Odor threshold**	No data available

Property	**Values**	**Remarks • Method**
Molecular weight	No data available	
pH	7	5% Solution
Melting point/freezing point	No data available	
Boiling point / boiling range	No data available	
Evaporation rate	Not applicable	
Vapor pressure	Not applicable	
Vapor density (air = 1)	Not applicable	
Specific gravity (water = 1 / air = 1)	No data available	
Partition Coefficient (n-octanol/water)	log K_{ow} ~ 0.08	
Soil Organic Carbon-Water Partition Coefficient	log K_{oc} ~ -0.03	
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
Completely soluble	160000 mg/L	20 °C / 68 °F

Solubility in other solvents

Chemical Name	Solubility classification	Solubility	Solubility Temperature
None reported	No information available	No data available	No information available

Other Information

Metal Corrosivity

Steel Corrosion Rate Not applicable
Aluminum Corrosion Rate Not applicable

Volatile Organic Compounds (VOC) Content
Not applicable

Chemical name	CAS No.	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Sodium nitroferricyanide	14402-89-2	No data available	-
Dichloroisocyanuric acid, sodium salt	2893-78-9	No data available	-

Explosive properties

Upper explosion limit No data available
Lower explosion limit No data available

Flammable properties

Flash point Not applicable

Flammability Limit in Air
Upper flammability limit: No data available
Lower flammability limit: No 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
Not applicable.

Chemical stability
Stability Stable under normal conditions.

Explosion data
Sensitivity to Mechanical Impact None
Sensitivity to Static Discharge None.

Possibility of Hazardous Reactions
Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization
None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials
Incompatible materials Strong oxidizing agents, strong acids, and strong bases.

Hazardous Decomposition Products
Cyanide. Nitrogen oxides. Sodium oxides. Carbon dioxide. Carbon monoxide. Chlorides.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure
Product Information

Inhalation May cause irritation of respiratory tract.

Eye contact Causes serious eye irritation. May cause redness, itching, and pain.

Skin contact May cause irritation. Prolonged contact may cause redness and irritation.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed.

Aggravated Medical Conditions Skin disorders. Eye disorders. Gastrointestinal tract. Preexisting eye disorders. Liver disorders. Respiratory disorders.

Toxicologically synergistic products None known.

Toxicokinetics, metabolism and distribution No information available.

Symptoms related to the physical, chemical and toxicological characteristics
Symptoms May cause redness and tearing of the eyes.

Product Acute 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

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 oral 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)	759.00 mg/kg
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	11.62 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 type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium nitroferricyanide (7 - 13%) CAS#: 14402-89-2	Rat LD_{50}	99 mg/kg	None reported	None reported	LOLI
Dichloroisocyanuric acid, sodium salt (7 - 13%) CAS#: 2893-78-9	Rat LD_{50}	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 acid, sodium salt (7 - 13%) CAS#: 2893-78-9	Rabbit LD_{50}	> 10000 mg/kg	None reported	None reported	No information available

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
Dichloroisocyanuric acid, sodium salt (7 - 13%) CAS#: 2893-78-9	Rat LC_{50}	1.17 mg/L	4 hours	None reported	IUCLID (The International Uniform Chemical Information Database)

Inhalation (Vapor) Exposure Route If available, see data below
Inhalation (Gas) Exposure Route If available, see data below

Product Specific Target Organ Toxicity Single Exposure 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

Ingredient Specific Target Organ Toxicity Single Exposure Data

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

Aspiration toxicity

If available, see data below

Kinematic viscosity Not applicable

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
Dichloroisocyanuric acid, sodium salt (7 - 13%) CAS#: 2893-78-9	Existing human experience	Human	None reported	None reported	Skin irritant	HSDB (Hazardous Substances Data Bank)

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 (7 - 13%) CAS#: 2893-78-9	Existing human experience	Human	None reported	None reported	Corrosive to eyes	HSDB (Hazardous Substances Data Bank)

Sensitization Information

Product Sensitization Data
Skin Sensitization Exposure Route No data available.
Respiratory Sensitization Exposure Route No 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 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 Specific Target Organ Toxicity Repeat Exposure Data
Oral Exposure Route If available, see data below
Dermal Exposure Route If available, see data below
Inhalation (Dust/Mist) Exposure Route If available, see data below
Inhalation (Vapor) Exposure Route If available, see data below
Inhalation (Gas) Exposure Route If available, see data below

Product Carcinogenicity 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

Ingredient Carcinogenicity Data

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Sodium nitroferricyanide	14402-89-2	-	-	-	-
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 Labor)	Does not apply

Oral Exposure Route If available, see data below
Dermal Exposure Route If available, see data below

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

Product Germ Cell Mutagenicity *invivo* **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

Ingredient Germ Cell Mutagenicity *invivo* **Data**
Oral Exposure Route If available, see data below
Dermal Exposure Route If available, see data below
Inhalation (Dust/Mist) Exposure Route If available, see data below
Inhalation (Vapor) Exposure Route If available, see data below
Inhalation (Gas) Exposure Route If available, see data below

Product Reproductive 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

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 (7 - 13%) CAS#: 2893-78-9	Mouse TD_{Lo}	4000 mg/kg	9 days	**Effects on Newborn** Growth statistics (e.g. % reduced weight gain) Physical **Specific Developmental Abnormalities** Musculoskeletal system	RTECS (Registry of Toxic Effects of Chemical Substances)

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

12. ECOLOGICAL INFORMATION

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

Ecotoxicity Toxic to aquatic life with long lasting effects

Product Ecological Data
Aquatic toxicity

Fish No data available
Crustacea No data available
Algae 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 (7 - 13%) CAS#: 2893-78-9	96 hours	*Oncorhynchus mykiss*	LC_{50}	0.25 mg/L	PEEN (Pan European Ecological Network)

Crustacea 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 (7 - 13%) CAS#: 2893-78-9	48 Hours	*Daphnia magna*	LC_{50}	0.28 mg/L	ECHA (The European Chemicals Agency) PEEN (Pan European Ecological Network)

Algae If available, see ingredient data below

Other Information

Canadian Environmental Protection Act (CEPA) - Domestic Substances List (DSL): Environmentally Hazardous Substances Categorizations

Chemical name	Category	Persistent	Bioaccumulation	Inherently Toxic to Aquatic Organisms
Sodium nitroferricyanide (7 - 13%) CAS#: 14402-89-2	Inorganics	Yes	No	Yes

Persistence and degradability

Product Biodegradability Data
No data available.

Ingredient Biodegradability Data

Chemical name	Test method	Biodegradation	Exposure time	Results
Dichloroisocyanuric acid, sodium salt (7 - 13%) CAS#: 2893-78-9	Estimation through BIOWIN v4.10 part of the Estimation Programs Interface (EPI) Suite™	None reported	None reported	Not readily biodegradable

Bioaccumulation

Product Bioaccumulation Data
No data available.

Partition Coefficient (n-octanol/water) log K_{ow} ~ 0.08

Ingredient Bioaccumulation Data

Chemical name	Test method	Exposure time	Species	Bioconcentration factor (BCF)	Results
Dichloroisocyanuric acid, sodium salt (7 - 13%) CAS#: 2893-78-9	Estimation through BCFBAF v3.01 part of the Estimation Programs Interface (EPI) Suite™	None reported	None reported	BCF = 3.23594	Does not have the potential to bioaccumulate

Mobility

Soil Organic Carbon-Water Partition Coefficient log K_{oc} ~ -0.03

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Completely soluble	160000 mg/L	20 °C / 68 °F

Other adverse effects

No information available.

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Sodium nitroferricyanide (7 - 13%) CAS#: 14402-89-2	Group III Chemical	-	-
Dichloroisocyanuric acid, sodium salt (7 - 13%) CAS#: 2893-78-9	Group III Chemical	-	-

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. TRANSPORT INFORMATION

Transport Canada

UN/ID no UN3077
Proper shipping name Environmentally hazardous substances, solid, n.o.s.
DOT Technical Name (Sodium dichloroisocyanurate mixture)
Hazard Class 9
Packing Group III
Special Provisions Contact with acids forms toxic fumes.
Marine pollutant This product contains a chemical which is listed as a marine pollutant according to DOT.

TDG

UN/ID no UN3077
Hazard Class 9
Packing Group III
Marine pollutant This product contains a chemical which is listed as a marine pollutant according to TDG.

IATA

UN/ID no UN3077
Proper shipping name Environmentally hazardous substances, solid, n.o.s.
IATA Technical Name (Sodium dichloroisocyanurate mixture)
Hazard Class 9
Packing Group III

IMDG

UN/ID no UN3077
Proper shipping name Environmentally hazardous substances, solid, n.o.s.
IMDG Technical Name (Sodium dichloroisocyanurate mixture)
Hazard Class 9

Packing Group	III
Marine pollutant	This material meets the definition of a marine pollutant This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

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

Regulatory information

National Inventories

DSL/NDSL	Complies

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

International Inventories

TSCA	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
TCSI	Complies
AICS	Complies
NZIoC	Does not comply

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

Canada - CEPA - Mercury Containing Products
None

International Regulations

Ozone-depleting substances (ODS)	Not applicable
Persistent Organic Pollutants	Not applicable
Export Notification requirements	Not applicable

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

Special Comments
None

NFPA and HMIS Classifications

NFPA	Health hazards - 2	Flammability - 0	Instability - 0	Physical and Chemical Properties -
HMIS	Health hazards - 1	Flammability - 0	Physical Hazards - 0	Personal protection - X - See section 8 for more information

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

NIOSH IDLH	*Immediately Dangerous to Life or Health*
ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
NDF	*no data*

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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Revision Note
SDS sections updated
2

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.

End of Safety Data Sheet