SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier
Product Name HexaVer™ Chelant

Other means of identification
Product Code(s) 24399

Safety data sheet number M00120

Recommended use of the chemical and restrictions on use
Recommended Use Laboratory reagent.
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 +1(970) 669-3050

Emergency telephone number
+1(303) 623-5716 - 24 Hour Service +1(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)

Serious eye damage/eye irritation	Category 2A

Hazards not otherwise classified (HNOC)
Not applicable

Label elements

Signal word - Warning

Hazard statements

H319 - Causes serious eye irritation

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

Other Information
Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	Cyclohexanediaminetetraacetic Acid, Disodium Salt
Chemical Family	Salts of Organic Acids.
Formula	$C_{14}H_{20}N_2O_8Na_2 \cdot xH_2O$
CAS No	57137-35-6
Alternate CAS Number	5786-78-7 - Anhydrous

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No.	Percent Range	HMRIC #
Glycine, N,N-(1R,2R)-1,2-cyclohexanediylbis[N-(carboxymethyl)-, sodium salt (1:2), rel-	57137-35-6	100%	-

4. FIRST AID MEASURES

Description of first aid measures

General advice IF IN EYES: Flush eyes for at least 15 minutes.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist, call a physician.

Inhalation IF INHALED: Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.

Ingestion IF SWALLOWED: Rinse Mouth. If symptoms persist, call a physician.

Self-protection of the first aider Use personal protective equipment as required. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

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 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.

Flammable properties
Can burn in fire, releasing toxic vapors. Material is not classified as flammable according to GHS criteria.

Specific hazards arising from the chemical
None reported.

Hazardous combustion products Carbon monoxide, Carbon dioxide. Nitrogen oxides. Sodium monoxide.

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.

6. ACCIDENTAL RELEASE MEASURES

U.S. Notice Only 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.

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.

For emergency responders Use personal protection recommended in Section 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. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Take up 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 Not applicable

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Legend See section 16 for terms and abbreviations

Appropriate engineering controls

Engineering Controls Eyewash stations
Ventilation systems

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 protective gloves and protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations 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. Regular cleaning of equipment, work area and clothing is recommended. Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls
Prevent product from entering drains. 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 crystalline **Color** white

Odor Odorless **Odor threshold** No data available

Property	Values	Remarks • Method
Molecular weight	441.23 g/mole	
pH	4.6	5% Solution
Melting point/freezing point	> 400 °C / 752 °F	
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)	1.59	
Partition Coefficient (n-octanol/water)	log K_{ow} = -10	Estimation through KOWWIN v1.68 part of the Estimation Programs Interface (EPI) Suite™
Soil Organic Carbon-Water Partition Coefficient	log K_{oc} = 3.54	Estimation through KOCWIN v2.00 part of the Estimation Programs Interface (EPI) Suite™
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	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

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

Other Information

Metal Corrosivity	Not classified as corrosive to metal according to GHS criteria
Steel Corrosion Rate	Not applicable
Aluminum Corrosion Rate	Not applicable
Volatile Organic Compounds (VOC) Content	Not applicable.
Bulk density	No data available
Explosive properties	Not classified according to GHS criteria.
Explosion data	Can burn in fire, releasing toxic vapors.
Upper explosion limit	No data available
Lower explosion limit	No data available
Flammable properties	Can burn in fire, releasing toxic vapors. Material is not classified

as flammable according 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
Carbon dioxide. Carbon monoxide. Nitrogen oxides.

Explosive properties
Not classified according to GHS criteria. Can burn in fire, releasing toxic vapors.

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
None reported

11. TOXICOLOGICAL INFORMATION

NIOSH (RTECS) Number Not applicable

Information on Likely Routes of Exposure

Product Information	Causes serious eye irritation.
Inhalation	No known effect based on information supplied.
Eye contact	Contact with eyes may cause irritation. Severely irritating to eyes.
Skin contact	No known effect based on information supplied.
Ingestion	No known effect based on information supplied.
Aggravated Medical Conditions	Eye disorders.
Toxicologically synergistic products	None known.
Toxicokinetics, metabolism and distribution	This Product is by Weight 100% an Individual Pure Chemical Substance.

Product Acute Toxicity Data This Product is by Weight 100% an Individual Pure Chemical Substance

Oral Exposure Route If available, see ingredient data below

Dermal Exposure Route If available, see ingredient data below

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

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

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

Acute Toxicity Estimations (ATE) Not applicable

Ingredient 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

Product Specific Target Organ Toxicity Single Exposure Data

Oral Exposure Route If available, see ingredient data below

Dermal Exposure Route If available, see ingredient data below

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

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

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

Ingredient 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

Aspiration toxicity
If available, see data below

Kinematic viscosity Not applicable

Product Skin Corrosion/Irritation Data
This Product is by Weight 100% an Individual Pure Chemical Substance. If available, see ingredient data below.

Ingredient Skin Corrosion/Irritation Data
No data available

Product Serious Eye Damage/Eye Irritation Data
This Product is by Weight 100% an Individual Pure Chemical Substance. If available, see ingredient data below.

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
Glycine, N,N-(1R,2R)-1,2-cyclohexanediylbis[N-(carboxymethyl)-, sodium salt (1:2), rel-(100%) CAS#: 57137-35-6	None reported	Rabbit	None reported	None reported	Eye irritant	IUCLID (The International Uniform Chemical Information Database)

Sensitization Information

Product Sensitization Data

Skin Sensitization Exposure Route This Product is by Weight 100% an Individual Pure Chemical Substance. If available, see ingredient data below.

Respiratory Sensitization Exposure Route This Product is by Weight 100% an Individual Pure Chemical Substance. If available, see ingredient data below.

Ingredient Sensitization Data

Skin Sensitization Exposure Route No data available.

Respiratory Sensitization Exposure Route No data available.

Chronic Toxicity Information

Product Specific Target Organ Toxicity Repeat Dose Data

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

Ingredient Specific Target Organ Toxicity Repeat 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

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Glycine, N,N-(1R,2R)-1,2-cyclohexanediylbis[N-(carboxymethyl)-, sodium salt (1:2), rel-	57137-35-6	-	-	-	-

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

Product Carcinogenicity Data	This Product is by Weight 100% an Individual Pure Chemical Substance
Oral Exposure Route	If available, see ingredient data below
Dermal Exposure Route	If available, see ingredient data below
Inhalation (Dust/Mist) Exposure Route	If available, see ingredient data below
Inhalation (Vapor) Exposure Route	If available, see ingredient data below
Inhalation (Gas) Exposure Route	If available, see ingredient data below

Ingredient 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

Product Germ Cell Mutagenicity *invitro* **Data**
This Product is by Weight 100% an Individual Pure Chemical Substance. If available, see ingredient data below.

Ingredient Germ Cell Mutagenicity *invitro* **Data**	No data available

Product Germ Cell Mutagenicity *invivo* **Data**
This Product is by Weight 100% an Individual Pure Chemical Substance.

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

Ingredient 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

Product Reproductive Toxicity Data
This Product is by Weight 100% an Individual Pure Chemical Substance.

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

Ingredient 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

12. ECOLOGICAL INFORMATION

Ecotoxicity Based on the classification principles, not classified as hazardous to the environment.

Product Ecological Data This Product is by Weight 100% an Individual Pure Chemical Substance

Aquatic toxicity

Fish If available, see ingredient data below

Crustacea If available, see ingredient data below

Algae If available, see ingredient data below

Terrestrial toxicity

Soil If available, see ingredient data below

Vertebrates If available, see ingredient data below

Invertebrates If available, see ingredient data below

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
Glycine, N,N-(1R,2R)-1,2-cyclohexanediylbis[N-(carboxymethyl)-, sodium salt (1:2), rel-(100%) CAS#: 57137-35-6	96 hours	None reported	LC_{50}	35600 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

Crustacea If available, see ingredient data below

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Glycine, N,N-(1R,2R)-1,2-cyclohexanediylbis[N-(carboxymethyl)-, sodium salt (1:2), rel-(100%) CAS#: 57137-35-6	48 Hours	None reported	LC_{50}	26162 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

Algae If available, see ingredient data below

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Glycine, N,N-(1R,2R)-1,2-cyclohexanediylbis[N-(carboxymethyl)-, sodium salt (1:2), rel-	96 hours	None reported	EC_{50}	56103 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

(100%) CAS#: 57137-35-6					

Terrestrial toxicity

Soil No data available

Vertebrates No data available

Invertebrates No data available

Other Information

Persistence and degradability
Not readily biodegradable according to GHS criteria.

Product Biodegradability Data
This Product is by Weight 100% an Individual Pure Chemical Substance. If available, see ingredient data below.

Ingredient Biodegradability Data
Test data reported below

Chemical name	Test method	Biodegradation	Exposure time	Results
Glycine, N,N-(1R,2R)-1,2-cyclohexanediylbis[N-(carboxymethyl)-, sodium salt (1:2), rel- (100%) CAS#: 57137-35-6	OECD Test No. 303: Simulation Test - Aerobic Sewage Treatment -- A: Activated Sludge Units; B: Biofilms	None reported	None reported	Not readily biodegradable

Bioaccumulation
Does not have the potential to bioaccumulate according to GHS criteria.

Product Bioaccumulation Data This Product is by Weight 100% an Individual Pure Chemical Substance.

Ingredient Bioaccumulation Data No data available

Additional information

Product Information

Partition Coefficient (n-octanol/water) log K_{ow} = -10

Ingredient Information

Chemical name	Partition Coefficient (n-octanol/water)	Method
Glycine, N,N-(1R,2R)-1,2-cyclohexanediylbis[N-(carboxymethyl)-, sodium salt (1:2), rel- (100%) CAS#: 57137-35-6	log K_{ow} = -10	Estimation through KOWWIN v1.68 part of the Estimation Programs Interface (EPI) Suite™

Mobility
Mobility in soil: Moderate to low mobility. If available, see ingredient data below.

Product Information

Soil Organic Carbon-Water Partition Coefficient log K_{oc} = 3.54

Ingredient Information

Chemical name	Soil Organic Carbon-Water Partition Coefficient	Method
Glycine, N,N-(1R,2R)-1,2-cyclohexanediylbis[N-(carboxymethyl)-, sodium salt (1:2), rel-(100%) CAS#: 57137-35-6	log K_{oc} = 3.54	Estimation through KOCWIN v2.00 part of the Estimation Programs Interface (EPI) Suite™

Additional information

Water solubility

Product Information

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

Ingredient Information

Chemical name	Water solubility classification	Water solubility	Water solubility temperature °C	Water solubility temperature °F
Glycine, N,N-(1R,2R)-1,2-cyclohexanediylbis[N-(carboxymethyl)-, sodium salt (1:2), rel- CAS#: 57137-35-6	Soluble	> 1000 mg/L	25 °C	77 °F

Other adverse effects
No information available.

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 Working in a well-ventilated area. Rinse three times with an appropriate solvent. Collect rinsate and dispose of according to local, state, or federal regulations. Dispose of empty container as normal trash. In the US, rinsate from empty containers is classified as hazardous waste and should be disposed of at an E.P.A. approved facility. Rinsate from empty containers may contain sufficient product to require disposal as hazardous waste in countries other than the US. Improper disposal or reuse of this container may be dangerous and illegal. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

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

alkali, such as soda ash or sodium bicarbonate. If permitted by regulation. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system. Check with local municipal and state authorities and waste contractors for pertinent local information regarding the proper disposal of chemicals.

14. TRANSPORT INFORMATION

U.S. DOT
Proper shipping name Acetal

TDG
Proper shipping name Acetal

IATA
Proper shipping name Acetal

IMDG
Proper shipping name Acetal

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
IECSC	Does not comply
KECL	Complies
PICCS	Does not comply
TCSI	Complies
AICS	Complies
NZIoC	Complies

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	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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

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)
Not applicable

NFPA and HMIS Classifications

NFPA	**Health hazards** - 2	**Flammability** - 0	**Instability** - 0	**Physical and Chemical Properties** -
HMIS	**Health hazards** - 0	**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
Issue Date	08-Jun-2016
Revision Date	25-Sep-2017
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.

End of Safety Data Sheet