

SAFETY DATA SHEET

Issue Date 06-May-2021 **Revision Date** 26-Jan-2024 **Version** 3.6 **Page** 1 / 15

1. IDENTIFICATION

Product identifier

Product Name Dissolved Oxygen Electrode Filling Solution

Other means of identification

Product Code(s) 2759126

Safety data sheet number M01669

Recommended use of the chemical and restrictions on use

Recommended Use Reference electrode solution.

Uses advised against Consumer use.

Restrictions on use For Laboratory Use Only.

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

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word

None

Hazard statements

The product contains no substances which at their given concentration, are considered to be hazardous to health

Other Hazards Known

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance Not applicable

Mixture

Chemical Family Aqueous solution of organic solvents.

Chemical nature aqueous solution.

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No	Percent Range	HMRIC #
1,2,3-Propanetriol	56-81-5	10 - 20%	-
Glutaraldehyde	111-30-8	<0.1%	-

4. FIRST AID MEASURES

Description of first aid measures

General advice No hazards which require special first aid measures. Use first aid treatment according to the

nature of the injury.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms See Section 11 for additional Toxicological Information.

Indication of any immediate medical attention and special treatment needed

5. FIRE-FIGHTING MEASURES

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 No information available.

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

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

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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 Ensure adequate ventilation.

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 Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Take up mechanically, placing in appropriate containers for disposal.

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

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

Precautions for safe handling

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

Conditions for safe storage, including any incompatibilities

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

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
1,2,3-Propanetriol	-	TWA: 15 mg/m ³	NDF
CAS#: 56-81-5		TWA: 5 mg/m ³	
		(vacated) TWA: 10 mg/m ³	
		(vacated) TWA: 5 mg/m ³	
Glutaraldehyde	dermal sensitizer;respiratory	(vacated) Ceiling: 0.2 ppm	Ceiling: 0.2 ppm
CAS#: 111-30-8	sensitizer	(vacated) Ceiling: 0.8 mg/m ³	Ceiling: 0.8 mg/m ³
	Ceiling: 0.05 ppm activated		
	or unactivated		

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations

Ventilation systems. Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. The type of protective

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equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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. Ensure

adequate ventilation.

Hand Protection Wear suitable gloves. Barrier creams may help to protect the exposed areas of skin.

Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN

374-1:2016.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection No special protective equipment required. Avoid contact with eyes, skin and clothing.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

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

Odor

Liquid

Appearance aqueous solution

Color colorless

Odorless Odor threshold No information available

Property Values Remarks • Method

Molecular weight No data available

pH 7 @ 20 °C

Melting point / freezing point \sim -14 °C / 6.8 °F

Initial boiling point and boiling range ~ 104 °C / 219.2 °F

Evaporation rate 0.78 (water = 1)

Vapor pressure 0.3 mm Hg / 0.04 kPa at 20 °C / 68 °F

Relative vapor density 0.62

Specific gravity - VALUE 1 1.1

Partition coefficient Not applicable

Soil Organic Carbon-Water Partition

Coefficient

Not applicable

Autoignition temperature No data available

Decomposition temperatureNo information available

Dynamic viscosity No data available

Kinematic viscosity No information available

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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_
None reported	No information available	No data available	No information available

Other information

Metal Corrosivity

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

Volatile Organic Compounds (VOC) Content

See ingredients information below

Chemical name	CAS No	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
1,2,3-Propanetriol	56-81-5	No data available	X
Glutaraldehyde	111-30-8	100%	-

Explosive properties

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

Flammable properties

Flash point No data available

Flammability Limit in Air

Upper flammability limit: No data available Lower flammability limit: No data available No data available.

Oxidizing properties

Bulk density No data available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stable under normal conditions.

Explosion data

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

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Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation No known effect based on information supplied.

Eye contact No known effect based on information supplied.

Skin contact No known effect based on information supplied.

Ingestion No known effect based on information supplied.

Symptoms No information available.

Acute toxicity

Based on available data, the classification criteria are not met

Mixture

No data available.

Ingredient Acute Toxicity Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
1,2,3-Propanetriol	Rat	12600 mg/kg	None reported	None reported	RTECS
(10 - 20%)	LD ₅₀				
CAS#: 56-81-5					
Glutaraldehyde	Rat	134 mg/kg	None reported	None reported	GESTIS
(<0.1%)	LD ₅₀				
CAS#: 111-30-8					

Dermal Exposure Route

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
1,2,3-Propanetriol (10 - 20%) CAS#: 56-81-5	Rabbit LD₅₀	> 10000 mg/kg	None reported	None reported	GESTIS

Inhalation (Dust/Mist) Exposure Route

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Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Rat LC50	0.39 mg/L	4 hours	None reported	ECHA

Unknown Acute Toxicity

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

Acute Toxicity Estimations (ATE)

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

ATEmix (oral)	No information available mg/kg
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Skin Corrosion/Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Glutaraldehyde (<0.1%)	OECD Test 404: Acute Dermal	Rabbit	0.5 mL	4 hours	Corrosive to skin	ECHA
CAS#: 111-30-8	Corrosion/Irritation					

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Eye Damage/Eye Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Standard Draize Test	Rabbit	0.1 mL	24 hours	Corrosive to eyes	ECHA

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Sensitization Data

Test data reported below.

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Skin Sensitization Exposure Route

Chemical name	Test method	Species	Results	Key literature references and sources for data
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Open Epicutaneous Test	Guinea pig	Confirmed to be a skin sensitizer	ECHA

Respiratory Sensitization Exposure Route

Chemical name	Test method	Species	Results	Key literature references and sources for data
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Based on human experience	Human	Confirmed to be a respiratory sensitizer	NITE

STOT - single exposure

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
1,2,3-Propanetriol	Human		None reported	Kidney, Ureter, or Bladder	RTECS
(10 - 20%)	LD_Lo	3 3		Changes in tubules (including	
CAS#: 56-81-5				acute renal failure, acute tubular	
				necrosis)	

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
1,2,3-Propanetriol (10 - 20%) CAS#: 56-81-5	Rat TD∟₀	96000 mg/kg	30 days	Biochemical Enzyme inhibition, induction, or change in blood or tissue levels (true cholinesterase) Blood	RTECS
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Rat NOAEL	29.9 mg/kg	90 days	Nutritional and Gross Metabolic Weight loss or decreased weight gain	ECHA

Dermal Exposure Route

Chemical name Endpoint Reported Exposure Toxicological effects Key literature references and
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	type	dose	time		sources for data
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Rat NOAEL	150 mg/kg	90 days	No toxicological effects observed	ECHA

Inhalation (Vapor) Exposure Route

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Rat NOAEC	0.125 mg/L	730 days	Nutritional and Gross Metabolic Weight loss or decreased weight gain	ECHA

Carcinogenicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Carcinogenicity Data

Test data reported below.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
1,2,3-Propanetriol	56-81-5	-	-	-	-
Glutaraldehyde	111-30-8	-	-	-	-

<u>Legend</u>

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	Does not apply

Oral Exposure Route

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
1,2,3-Propanetriol (10 - 20%) CAS#: 56-81-5	Mouse	87500 mg/kg	25 weeks	Lungs, Thorax, or Respiration Tumors	RTECS
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Rat TD∟₀	2912 mg/kg	2 years	Blood Leukemia	RTECS

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Mixture invitro Data

No data available.

Substance invitro Data

Test data reported below.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
1,2,3-Propanetriol (10 - 20%) CAS#: 56-81-5	DNA inhibition	Human lymphocyte	200 mmol/L	None reported	Positive test result for mutagenicity	RTECS
Glutaraldehyde	Mutation in	Salmonella	5 mg/plate	None reported	Positive test result for	ECHA

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(<0.1%)	microorganisms	typhimurium	mutagenicity	
CAS#: 111-30-8	_			

Mixture invivo Data

No data available.

Substance invivo Data

Test data reported below.

Oral Exposure Route

Chemical name	Test	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
1,2,3-Propanetriol (10 - 20%) CAS#: 56-81-5	Cytogenetic analysis	Rat	1000 mg/kg	None reported	Positive test result for mutagenicity	RTECS

Reproductive toxicity

Based on available data, the classification criteria are not met.

Mixture

No data available.

Ingredient Reproductive Toxicity Data

Test data reported below.

Oral Exposure Route

Chemical name	Endpoint	Reported	Exposure	Toxicological effects	Key literature references and
	type	dose	time		sources for data
1,2,3-Propanetriol (10 - 20%) CAS#: 56-81-5	Rat TD∟o	100 mg/kg	None reported	Effects on Fertility Litter size (e.g. # fetuses per litter; measured before birth) Post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants)	RTECS
Glutaraldehyde (<0.1%) CAS#: 111-30-8	Rat NOAEL	500 ppm	Multiple generations	No reproductive or developmental toxic effects observed	ECHA

Aspiration hazard

Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Ecotoxicity Based on available data, the classification criteria are not met.

Unknown aquatic toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

Mixture

Aquatic Acute Toxicity

No data available.

Aquatic Chronic Toxicity

No data available.

Substance

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Aquatic Acute Toxicity
Test data reported below.

Fish

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Glutaraldehyde (<0.1%) CAS#: 111-30-8	96 hours	None reported	LC50	3.5 mg/L	GESTIS

Crustacea

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
1,2,3-Propanetriol (10 - 20%) CAS#: 56-81-5	48 Hours	Daphnia magna	LC50	1955 mg/L	IUCLID
Glutaraldehyde (<0.1%) CAS#: 111-30-8	48 Hours	None reported	EC50	0.75 mg/L	GESTIS

Algae

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Glutaraldehyde (<0.1%) CAS#: 111-30-8	72 Hours	Scenedemus subspicatus	EC50	0.6 mg/L	ECHA

Aquatic Chronic Toxicity

Test data reported below.

Fish

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
1,2,3-Propanetriol (10 - 20%) CAS#: 56-81-5	96 hours	Oncorhynchus mykiss	LC ₁₀₀	51000 mg/L	IUCLID

Algae

Chemical name	Exposure	Species	Endpoint	Reported dose	Key literature references and
	time		type		sources for data
Glutaraldehyde (<0.1%) CAS#: 111-30-8	None reported	Scenedemus subspicatus	NOEC	< 0.0391 mg/L	ECHA

Persistence and degradability

Mixture

No data available.

Bioaccumulation

There is no data for this product

Mixture

No data available.

Partition coefficient

Not applicable

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Mobility

Soil Organic Carbon-Water Partition Coefficient Not applicable

Other adverse effects
No information available

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.

US EPA Waste Number No information available

Special instructions for disposal Dilute to 3 to 5 times the volume with cold water. If permitted by regulation. Open cold water

tap completely, slowly pour the material to the drain. Flush system with plenty of water. Check with local municipal and state authorities and waste contractors for pertinent local

information regarding the proper disposal of chemicals.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG Not regulated

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 Complies
KECL Complies
PICCS Complies
TCSI Complies

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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

IMERC: Not applicable

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania
1,2,3-Propanetriol 56-81-5	X	X	X
Glutaraldehyde 111-30-8	X	X	X

U.S. EPA Label Information

Chemical name	FIFRA	FDA
1,2,3-Propanetriol	180.0950	21 CFR 182.90,21 CFR 182.1320

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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
Glutaraldehyde	Declarable Substance (LR)	0.1 %
111-30-8	Prohibited Substance (LR)	

NFPA and HMIS Classifications

NFPA	Health hazards - 0	Flammability - 0	Instability - 0	Physical and chemical properties -
HMIS	Health hazards - 0	Flammability - 0	Physical hazards - 0	Personal protection -
		_		×
				- I

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

ACGIH (American Conference of Governmental Industrial Hygienists)
ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS (Chemical Carcinogenesis Research Information System)

CDC (Center for Disease Control)

CEPA (Canadian Environmental Protection Agency)

CICAD CICAD (Concise International Chemical Assessment Documents)

ECHA (The European Chemicals Agency)
EEA EEA (European Environment Agency)
EPA EPA (Environmental Protection Agency)

ERMA ERMA (New Zealands Environmental Risk Management Authority)

ECOSARS Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

FDA (Food & Drug Administration)

GESTIS GESTIS (Information System on Hazardous Substances of the German Social Accident

Insurance)

HSDB (Hazardous Substances Data Bank)

INERIS INERIS (The National Industrial Environment and Risks Institute)
IPCS INCHEM IPCS INCHEM (International Programme on Chemical Safety)
IUCLID IUCLID (The International Uniform Chemical Information Database)
NITE Japan National Institute of Technology and Evaluation (NITE)

NIH (National Institutes of Health)

NIOSH NIOSH (National Institute for Occupational Safety and Health)
LOLI LOLI (List of Lists - An International Chemical Regulatory Database)

NDF no data

NICNAS Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH IDLH Immediately Dangerous to Life or Health

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEEN (Pan European Ecological Network)

RTECS RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS SIDS (Screening Information Dataset) for High Volume Chemicals

SYKE The Finnish Environment Institute (SYKE)
USDA USDA (United States Department of Agriculture)
USDC USDC (United States Department of Commerce)

WHO (World Health Organization)

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

Х 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 Skin sensitization SKN+ RSP+ Respiratory sensitization Hazard Designation Carcinogen Reproductive toxicant С R

Μ mutagen

Prepared By Hach Product Compliance Department

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Revision Date 26-Jan-2024

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.**

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End of Safety Data Sheet

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