

Revision date 29-Aug-2023

SAFETY DATA SHEET

Version 4

1. Identification Product identifier AbaSI **Product name** Other means of identification **Product No** R0665 Synonyms None Recommended use of the chemical and restrictions on use This product is for research and development only **Recommended use** No information available **Restrictions on use** Details of the supplier of the safety data sheet Supplier Address New England BioLabs 240 County Road Ipswich, MA 01938 **ÚSA** Emergency telephone number **Company Phone Number** 978-927-5054, 800-632-5227 (toll free) Telefax 978-921-1350 E-mail address info@neb.com 24 Hour Emergency Phone Number Chemtrec +1 703-741-5970

2. Hazard(s) identification

Classification

Label elements

Hazard statements

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.

50 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

50 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

50 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other information

No information available.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Information Review	Date HMIRA filed and date exemption granted (if applicable)
Glycerol	56-81-5	30 - 60	-	_

4. First-aid measures

Description of first aid measures

Inhalation	Remove to fresh air.			
Eye contactRinse thoroughly with plenty of water for at least 15 minutes, lifting lower and Consult a physician.				
Skin contact	Wash skin with soap and water.			
Ingestion	Rinse mouth.			
Most important symptoms and effects, both acute and delayed				
Symptoms	No information available.			
Effects of Exposure	No information available.			
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.	
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.	
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.	
Specific hazards arising from the No information available. chemical		
Explosion data Sensitivity to mechanical impact None. Sensitivity to static discharge None.		
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.	

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

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.

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.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Glycerol	-	TWA: 15 mg/m ³ mist, total	-
56-81-5		particulate	
		TWA: 5 mg/m ³ mist,	
		respirable fraction	

	(vacated) TWA: 10 mg/m ³ mist, total particulate (vacated) TWA: 5 mg/m ³ mist, respirable fraction	
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Chemical name	Alberta	British Columbia	Ontario	Quebec
Glycerol	TWA: 10 mg/m ³	TWA: 10 mg/m ³	-	TWA: 10 mg/m ³
56-81-5	_	TWA: 3 mg/m ³		-

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
Glycerol	TWA: 10 mg/m ³		TWA: 10 mg/m ³	TWA: 30 mppcf
	STEL: 20 mg/m ³		STEL: 20 mg/m ³	TWA: 10 mg/m ³

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
Individual protection measures, su	ch as personal protective equipment
Eye/face protection	No special protective equipment required.
Hand protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
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.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Information on basic physical and chemical properties					
Physical state	Liquid				
Appearance	Colorless				
Color	No information available				
Odor	Mild				
Odor threshold	No information available				
Property	Values	Remarks • Method			
	No data available	None known			
рН					
Melting point / freezing point	No data available	None known			
Initial boiling point and boiling rang	eNo data available	None known			
Flash point	No data available	None known			
Evaporation rate	No data available	None known			
Flammability (solid, gas)	No data available	None known			
Flammability Limit in Air		None known			
Upper flammability or explosive limits	No data available				

Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
-	No data available	None known
Solubility(ies)		
Partition coefficient	No data available	None known
Autoignition temperature	392.78 °C / 739 °F	
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Other information		
	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC content	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.
Symptoms related to the physical, of Symptoms	chemical and toxicological characteristics No information available.
Acute toxicity	
Normania al management of tandalta	

Numerical measures of toxicity

ATEmix (inhalation-vapor)

The following values are calculated	based on c	hapter 3.1 of the GHS document
ATEmix (oral)	25,200.00	mg/kg
ATEmix (dermal)	20,000.00	mg/kg
ATEmix (inhalation-gas)	99,999.00	ppm

99,999.00 mg/l

ATEmix (inhalation-dust/mist) 99,999.00 mg/l

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

50 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

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Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 2.75 mg/L (Rat)4 h
56-81-5			-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. Ecological information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Glycerol	-	LC50: 51 - 57mL/L (96h,	-	-
56-81-5		Oncorhynchus mykiss)		

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Glycerol	-1.75
56-81-5	

Mobility in soil

No information available.

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.	

14. Transport information

DOT	Not regulated
TDG	Not regulated
<u>MEX</u>	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG	Not regulated
RID	Not regulated
ADR	Not regulated
<u>ADN</u>	Not regulated

15. Regulatory information

Regulatory information

International Regulations

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

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories TSCA

Contact supplier for inventory compliance status.

Chemical name	CAS No.	US TSCA Inventory listing	US TSCA inactive/active designation
Glycerol	56-81-5	Present	Active
Water	7732-18-5	Present	Active
Potassium Chloride	7447-40-7	Present	Active
Igepal CA-630	9002-93-1	Present	Active
Tween-20	9005-64-5	Present	Active

Chemical name	CAS No.	US TSCA Inventory listing	US TSCA inactive/active designation
Tris-HCI	1185-53-1	Present	Active
Ethylenediamine tetraacetic acid	60-00-4	Present	Active
Dithiothreitol	3483-12-3	Present	Active

DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AIIC	Contact supplier for inventory compliance status.
NZIoC	Contact supplier for inventory compliance status.

Legend:

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

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

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

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

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

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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).

<u>CERCLA</u>

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
Ethylenediamine tetraacetic acid	Х	Х	Х
60-00-4			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information				
NFPA HMIS	Health hazards 0 Health hazards 0	Flammability 1 Flammability 1	Instability 0 Physical hazards 0	Special hazards - Personal protection X
Key or legend to abbreviations and acronyms used in the safety data sheet				
Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION				
TWA	TWA (time-weighted average) STEL	STEL (Short Terr	m Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation	
Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) National Institute of Technology and Evaluation (NITE) Australia National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development Screening Information Data Set Worl				
Prepared by	y Environmental, Health and Safety, 978-927-5054			
Revision date29-Aug-2023				
Revision note No information available.				

Revision note Disclaimer

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End of Safety Data Sheet