Material Safety Data Sheet

SECTION 1. Identification

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of all chemical
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on-life-threatening

SECTION 2. Hazards Identification

2.1 Classification of substance or mixture Product definition: Mixture

Classification according to Reg (EC) No. 1272/2008 Not a hazardous substance or mixture according to directives 67/548/EEC or 1999/45/EC. OSHA Hazard Communication Standard 29CFR1910:1200 classifies this product as non-hazardous.

2.2. Label elements

The product is not required to be labelled according to EC directives. Precautionary statements (EU) 28 1272/2008, wear appropriate PPE, gloves and protective clothing.

2.3. Other hazards

Physical/chemical: NA Human health: NA

SECTION 3. Composition/information on ingredients

3.1 Substances

NA

3.2 Mixtures

Name	EC#	CAS#	Amount
Glycerol	200-289-5	56-81-5	50%
Sodium Azide	247-852-1	26628-22-8	<0.1%

According to European Directive 91/155/EEC and regulations (EC) 1272/2008 (CLP) Sodium Azide is non-hazardous when concentration < 0.1%.

SECTION 4. First Aid Measures

4.1. Description of first aid measures

Eye Exposure	In case of contact with eyes, immediately flush eyes with water for at least 15 minutes. Seek medical attention.
Ingestion	If swallowed and person is conscious, rinse mouth
	with water. Seek medical attention.
Inhalation	If inhaled, move to fresh air. If breathing difficulties
	occur, seek medical attention.
Skin	In case of contact, wash skin with soap and water.
Exposure	

4.2. Most important symptoms and effects, both acute and delayed Not applicable.

4.3. Indication of any immediate medical attention and special treatment needed

Not applicable.

SECTION 5. Fire Fighting Measures

5.1. Extinguishing media	Water spray, dry chemical, foam or carbon dioxide.
5.2. Special hazards	No data available.
arising from the	
substance or mixture	
5.3. Advice for	Wear protective clothing and self-contained
firefighters	breathing apparatus to prevent contact with
	skin and eyes.
5.4 Further	No data available.
information	

SECTION 6. Accidental Release Measures

6.1. Personal	Maintain adequate ventilation, eye wash
precautions, protective	and quick drench facilities in work area.
equipment and	Wear a lab coat, chemical resistant gloves
emergency procedures	and chemical safety.

6.2. Environmental precautions	Avoid dispersal of spilt material and runoff contact with soil. Prevent product from entering drains.
6.3. Methods and material for containment and cleaning up	Absorb liquid with an absorbent material. Transfer contaminated absorbent to a chemical waste container for disposal.
6.4. Reference to other sections	See Section 13.

SECTION 7. Handling and Storage

7.1. Precautions for safe handling	Avoid inhalation and contact with eyes and skin. Avoid prolonged or repeated exposure.
7.2. Conditions for safe storage, including any incompatibilities	Store according to instructions on the product label and data sheet.
7.3. Specific end use(s)	No other specific uses are intended. These products are for research purposes only and must not be used in diagnostic or other medical purposes.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Name	Occupational exposure limits (EH40/2005 WEL, UK)
Glycerol	TWA (8 h): 10 mg/m ^{3,} Form: Mist
Sodium Azide	TWA (8 h): 0.1 mg/m ³
	STEL (15 min): 0.3 mg/m ³

8.2. Exposure controls

Engineering	Practice good safety and industrial hygiene,
Controls	ensuring PPE is worn prior to handling. Wash
	hands after handling.
Eye/face	Avoid contact with the eyes, and wear safety
protection	glasses or goggles with side shields conforming
	to EN 166 (EU).
Skin protection -	Avoid contact with skin and mucous
hands	membranes. Avoid prolonged or repeated
	contact with skin, and wear gloves which
	conform to EN374 (EU). Gloves should be of
	non-reactive material such as latex, butyl
	rubber, polyvinyl chloride, etc. The use of
	gloves should take into account other
	chemicals which are being handled, as well as
	physical properties, such as puncture
	protection, dexterity and thermal protection.
Skin protection -	Lab coat should be worn to protect other
other	bodily areas, as well as footwear which fully
	covers the feet.
Respiratory	Under normal conditions of use a respirator is
protection	not required. Should a respirator be required
	the user should be properly trained to ensure
	proper fitting.
Thermal	NA
hazards	

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Environmental exposure controls Comply with local environmental regulations. Where necessary this may include the use of cases, fume scrubbers, filters or engineering modifications to equipment to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Liquid at room temperature.
Colour	Colourless to yellow
Odour	Odourless.
Melting/Freezing Point	Data not available.
Initial boiling point & boiling	Data not available.
range	
Flammability	Data not available.
Lower and upper explosion	Data not available.
limit	
Flash point	Data not available.
Auto-ignition temperature	Data not available.
Decomposition temperature	Data not available.
рН	7.4 – 7.8
Kinematic viscosity	Data not available.
Solubility	Data not available.
Partition coefficient (n-	Data not available.
octanol/water)	
Vapour pressure	Data not available.
Relative density	Data not available.
Relative vapour density	Data not available.
Particle characteristics	Data not available.

9.2. Other information

Not available

SECTION 10. Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Product is stable under normal operating conditions, and when used according to the data sheet.

10.3. Possibility of hazardous reactions

No known reactions when used as described.

10.4. Conditions to avoid

Extreme temperatures and direct sunlight.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal use conditions.

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

This product is for experimental/research uses only. It has not been completely analysed, and all of the hazards may not be known.

Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycerol	= 12600 mg/kg (Rat)	> 10g/kg (Rabbit)	> 570 mg/m³ (Rat) 1 h
Sodium Azide	27 mg/kg (Rat)	20 mg/kg (Rabbit)	0.054-0.52 mg/L (dust)

Skin corrosion/irritation	May cause skin irritation.
Serious eye damage/eye irritation	May cause eye irritation.
Respiratory or skin sensitisation	No data available.
Germ cell mutagenicity	No data available.
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probably, possible or a confirmed human carcinogen by IARC.

Reproductive toxicity	No data available.	
STOT – single exposure	No data available.	
STOT – repeated exposure	No data available.	
Aspiration hazard	No data available.	
Additional information	RTECS: Not available.	
	This product is not subject to	
	OSHA classification.	

11.2. Information on other hazards No data available.

SECTION 12. Ecological information

12.1. Toxicity

Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Glycerol	-	LC50 51 – 57 mL/L (Oncorhynchus mykiss) 96 h	EC50 500 mg/L (Daphnia magna) 24 h
Sodium Azide	EC50 0.35 mg/L 96 h	LC50 0.7-5.5 mg/L (Oncorhynchus mykiss) 96 h	LC50 0.4-6.4 mg/L, 4.2 mg/L (Dpahnia pulex) 48 h

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment No data available.

12.6. Endocrine disrupting properties No data available.

12.7. Other adverse effects No data available.

NU Uata available.



SECTION 13. Disposal considerations

13.1. Waste treatment methods

Product

Dispose of in accordance with local laws and national/federal regulations. Smaller quantities may be disposed of with solid waste.

Packaging

Contaminated packaging should be disposed of in the same way as unused product.

SECTION 14. Transport information

14.1. UN number or ID number, groups and classes

Chemical Inventory Status		
DOT	Not regulated	
ADR/RID	Considered non-hazardous for transport.	
IMDG	Considered non-hazardous for transport.	
ΙΑΤΑ	Considered non-hazardous for transport.	
IATA-DGR	Considered non-hazardous for transport.	

14.6. Special precautions for user

Transport within user's premises: always transport within closed containers which are upright and secure. Users should be trained in the event of an accident of spillage.

14.7. Maritime transport in bulk according to IMO instruments Not applicable.

SECTION 15. Regulatory information

This safety data sheet conforms to regulation (EC) No. 1907/2006 (REACH), Annex II.

15.1. Safety, health and environmental regulations/legislation specific for the substance or

Mixture No data available.

15.2. Chemical safety assessment

No chemical safety assessment was carried out for this product.

SECTION 16. Other information

The products referenced in this sheet are sold with intention for research use only by personnel familiar with chemicals and trained professionals with good laboratory practices in science research. No other use is intended, and any other use may involve substantive hazards.

All information is believed to be correct at the time of writing, does not purport to be all inclusive and shall be used only as guide for experienced personnel. Users should carry out their own investigation to determine the suitability of the information for their purposes. In no way shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising from using the above information.