

MATERIAL SAFETY DATA SHEET (COSHH)**1. IDENTIFICATION OF THE PRODUCT AND COMPANY**

MSDS Name	Water	Glycerol	Sodium Azide
Percentage	70%	30%	0.02%
MSDS#	W3500	15523	20960
Catalogue Numbers:		56-81-5	BPE922I-500, S/2360, S/2380
Synonyms			Sodium salt of Hydrazoic acid; Smite; Azium.
Company identification:	Sigma-Aldrich Company Ltd. The Old Brickyard New Road, Gillingham, Dorset SP8 4XT UNITED KINGDOM	Sigma-Aldrich Company Ltd. The Old Brickyard New Road, Gillingham, Dorset SP8 4XT UNITED KINGDOM	Fisher Scientific UK Bishop Meadow Road Loughborough Leicestershire LE11 5RG UNITED KINGDOM
For information, call:	+44 (0)1747 833000	+44 (0)1747 833000	01509 231166
For emergencies, call:	+44 (0)1747 833100	+44 (0)1747 833100	01509 231166

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**2. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS No.	Chemical Name	Synonyms	Percentage	Formula	Molecular Weight	EINECS No.
7732-18-5	Water		70%			231-791-2
56-81-5	Glycerol	1,2,3-Propanetriol Glycerine	30%	C <sub>3</sub> H <sub>8</sub> O <sub>3</sub>	92.09 g/mol	200-289-5
26628-22-8	Sodium azide		0.02%			247-852-1
7782-79-8	Hydrazoic acid		Trace			231-965-8

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**3. HAZARDS IDENTIFICATION****3.1 Classification of the substance or mixture**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

This substance is not classified as dangerous according to Directive 67/548/EEC.

Note that the product contains 0.02% Sodium Azide which is toxic if undiluted, but at the dilution levels of 2 parts in 10,000, it is not considered a hazard.

**3.2 Label elements**

The product does not need to be labelled in accordance with EC directives or respective national laws.

**3.3 Other hazards**

None

**4. FIRST-AID MEASURES**

Consult a physician. Show this safety data sheet to the doctor in attendance.

4.1	Inhalation	If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
4.2	Eye contact	Rinse eyes with water copiously for at least 15 minutes. Seek medical advice as necessary.
4.3	Skin contact	Wash off with soap and plenty of water. Consult a physician.
4.4	Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed prolonged or repeated exposure can cause:**

Possible Nausea, Headache, Vomiting

**Indication of any immediate medical attention and special treatment needed**

No data available

**5. FIRE-FIGHTING MEASURES**

**This is not a flammable solution.**

5.1	Extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.2	Explosive quality	Nil.
5.3	Specific hazard	Carbon oxides.
5.4	Specific protective measures for fire fighters	Wear self-contained breathing apparatus for fire fighting if necessary.

**6. ACCIDENTAL RELEASE MEASURES****6.1 *Personal precautions, protective equipment and emergency procedures***

This product is 70% Water, 30% Glycerol, and minor traces of Sodium Azide.

If it was Glycerol only then the advice would be to use personal protective equipment.

Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Given the large concentration of Water in the product, the advice is to handle in accordance with good industrial hygiene and safety practice.

The minor traces of Sodium Azide can be ignored.

**6.2 *Environmental precautions***

This product is 70% Water, 30% Glycerol, and minor traces of Sodium Azide.

If it was Glycerol only then the advice would be to not let it enter drains.

Given the large concentration of Water in the product, it can be assumed to be okay.

The minor traces of Sodium Azide can be ignored.

**6.3 *Methods and materials for containment and cleaning up***

Water = Wipe up with absorbent material (e.g. cloth, fleece) and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**

7.1	Handling guidelines	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
7.2	Storage guidelines	No special storage conditions required. Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Hygroscopic.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Exposure controls***Appropriate engineering controls*

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**8.2 Personal protective equipment***Eye/face protection*

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

*Skin protection*

Handle with gloves.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

*Body Protection*

Impervious to clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

*Respiratory protection*

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**9. PHYSICAL AND CHEMICAL PROPERTIES**

If a property is not listed there is no data available.

Physical State:	Liquid.
Appearance and Odour:	Colourless. Odourless
Solubility in Water (20°C):	Soluble
pH:	5.5 – 8.0 at 25°C

**10. STABILITY AND REACTIVITY****10.1 Reactivity**

No data available

**10.2 Chemical stability**

No data available

**10.3 Possibility of hazardous reactions**

No data available

**10.4 Conditions to avoid**

No data available

**10.5 Incompatible materials**

Strong bases, Strong oxidizing agents

**10.6 Hazardous decomposition products**

Other decomposition products - no data available

**11. TOXICOLOGICAL INFORMATION**

If a property is not listed there is no data available.

Carcinogenicity	IARC: There are no components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Potential health effects	<p><b>Inhalation</b> : May be harmful if inhaled. May cause respiratory tract irritation.</p> <p><b>Ingestion</b> : May be harmful if swallowed.</p> <p><b>Skin</b> : May be harmful if absorbed through skin. May cause skin irritation.</p> <p><b>Eyes</b> : Causes eye irritation.</p>
Signs and Symptoms of exposure	Prolonged or repeated exposure can cause: Nausea, Headache, Vomiting
Additional Information	<p>RTECS: MA8050000 (Glycerol)</p> <p>CAS# 7732-18-5: ZC0110000 (Sodium Azide)</p> <p>CAS# 7782-79-8: MW2800000 (Sodium Azide)</p> <p>CAS# 26628-22-8: VY8050000 (Sodium Azide)</p>

**12. ECOLOGICAL INFORMATION**

No known adverse effects from normal use.

**13. DISPOSAL CONSIDERATIONS**

13.1	Packaging	Can be disposed of as normal waste in accordance with local authority regulations.
13.2	Contaminated Packaging	Dispose of as unused product.
13.3	Product	Offer surplus and non-recyclable solutions to a licensed disposal company.

**14. TRANSPORT INFORMATION**

No special conditions apply. Not dangerous.

**15. REGULATORY INFORMATION**

Labelling according to EC Directives

***Further information:***

This substance is not classified as dangerous according to Directive 67/548/EEC

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No data available

**15.2 Chemical Safety Assessment**

No data available

**16. OTHER INFORMATION**

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company 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, even if the company has been advised of the possibility of such damages.