

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

MSDS Name	Water	Glycerol	Sodium Azide
Percentage	78%	22%	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		78%			231-791-2
56-81-5	Glycerol	1,2,3-Propanetriol Glycerin	22%	C ₃ H ₈ O ₃	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 78% Water, 22% 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 78% Water, 22% 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

Physical State:	Liquid.
Appearance and Odour:	Colourless. Odourless
Evaporation Rate:	No data available
Boiling Point:	No data available
Freezing Point:	No data available
% Volatile (by weight):	No data available
Solubility in Water (20°C):	Soluble
pH:	5.5 – 8.0 at 25°C
Specific Gravity:	No data available

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

Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	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.
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity – repeated exposure	No data available
Aspiration hazard	No data available
Potential health effects	<p>Inhalation : May be harmful if inhaled. May cause respiratory tract irritation.</p> <p>Ingestion : May be harmful if swallowed.</p> <p>Skin : May be harmful if absorbed through skin. May cause skin irritation.</p> <p>Eyes : Causes eye irritation.</p>
Signs and Symptoms of exposure	Prolonged or repeated exposure can cause: Nausea, Headache, Vomiting
Additional Information	RTECS: MA8050000 (Glycerol) CAS# 7732-18-5: ZC0110000 (Sodium Azide) CAS# 7782-79-8: MW2800000 (Sodium Azide) CAS# 26628-22-8: VY8050000 (Sodium Azide)

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.