

SAFETY DATA SHEET

Safety Data Sheet according to (EC) No. 1907/2006.

SECTION 1: Identification of the substance/mixture and of the company/ undertaking**1.1. Product identifier:**

Storage Buffer

Product numbers: 1001-01; 1002-01; 1005-01; 1016-01; 1018-01; 1020-01; 1023-01; 1025-01; 1029-01; 1031-01; 1039-01; 1042-01; 1043-01; 1048-01; 1050-01; 1056-01; 1058-01; 1059-01; 1061-01; 1066-01; 1075-01; 1080-01; 1085-01; 1088-01; 1094-01; 1103-01; 1106-01; 1117-01; 1119-01; 1120-01; 1122-01; 1001-02; 1001-03; 1002-02; 1002-03; 1002-04; 1002-05; 1002-06; 1002-07; 1002-08; 1002-09; 1002-10; 1016-02; 1016-03; 1016-04; 1018-02; 1018-03; 1018-04; 1020-02; 1020-03; 1020-04; 1029-02; 1029-03; 1033-02; 1042-02; 1048-02; 1048-03; 1048-04; 1048-05; 1050-02; 1050-03; 1050-04; 1050-05; 1050-06; 1050-07; 1055-02; 1055-03; 1058-02; 1059-02; 1059-03; 1070-02; 1072-02; 1072-03; 1072-04; 1072-05; 1082-02; 1082-03; 1088-02; 1103-02; 1105-02; 1108-02; 1120-02; 1120-03; 1120-04; 1122-02; Custom-1

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Aqueous preparation for research and analysis. Restricted to professional users.

1.3. Details of the supplier of the safety data sheet:

immunAware

Panum 07-13-50

Phone: (+45) - 48 13 10 20

Blegdamsvej 3

Web: immunAware.com

DK-2200 Copenhagen N

Denmark

Responsible person for the safety data sheet (e-mail): to@immunAware.com**1.4. Emergency telephone number:**

NHS (England or Wales): Dial 111 or 0845 4647 NHS 24 (Scotland): Dial 111

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture:**

CLP (1272/2008): None

2.2. Label elements:

EUH210: Safety data sheet available on request.

2.3. Other hazards: Contains Sodium azide. Contact with acids may form toxic gases.

PBT/vPvB: No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures:**

% w/w	Substance name	CAS-no.	EC-no.	Index-no.	REACH reg.no.	Classification
≤30	Glycerol*	56-81-5	200-285-5	None	None	Not classified
<1	TRISmaleate salt	72200-76-1	276-455-6	None	None	Not classified
0.01	Sodium azide*	26628-22-8	247-852-1	011-004-00-7	None	Acute Tox. 2;H300 Aquatic Acute 1;H400 (M=1) Aquatic Chronic 1;H410(M=1) EUH032

*The substance has an occupational exposure limit.

Wording of hazard statements - see section 16.

SECTION 4: First-aid measures**4.1. Description of first aid measures:**

Inhalation: Move the affected person to fresh air. Keep at rest. If needed: Get medical attention.

Skin contact: Remove contaminated clothing and wash skin with water and mild soap. If irritation persists: Seek medical advice.

Eye contact: Immediately flush with water or physiological salt water for at least 5 minutes, holding eyelids open, remember to remove contact lenses, if any. If irritation persists: Seek medical advice.

Ingestion: Rinse mouth and drink plenty of water. In case of discomfort: Seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed:

May cause slight irritation of eyes, skin, lungs and gastrointestinal tract.

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

Show this safety data sheet to a physician or emergency ward.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media:

Not flammable.

5.2. Special hazards arising from the substance or mixture:

Not relevant (the product is not combustible).

5.3. Advice for firefighters:

Do not inhale smoke fumes. When extinguishing surrounding fires use breathing apparatus with an independent source of air.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment - see section 8.

6.2. Environmental precautions:

Do not empty into drains – see section 12. Inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up:

Absorb spilled liquid with inert material and place in a suitable container for disposal. Clean with water. Further handling of spillage - see section 13.

6.4. Reference to other sections:

See references above.

SECTION 7: Handling and storage

7.1. Precautions for safe handling:

Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Wash with plenty of water and soap after end use.

7.2. Conditions for safe storage, including any incompatibilities:

Store in a tightly closed original container in a well-ventilated area.

7.3. Specific end use(s):

See section 1.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters:

Occupational exposure limits (EH40/2015 with later amendments (2018)):

Substance	TWA (8h)	STEL (15 min.)	Comments
Sodium azide	0.1 mg/m ³	0.3 mg/m ³	Sk (can be absorbed through the skin)
Glycerol, mist	10 mg/m ³	-	-

DNEL/PNEC: No CSR.

8.2. Exposure controls:

Appropriate engineering controls: Ensure adequate ventilation.

Personal protective equipment:

Inhalation: Normally not necessary.

Skin: Wear protective gloves of e.g. nitrile or butyl (EN374). Breakthrough time, approx. 3 hours.

Eyes: Wear tight fitting safety goggles (EN166) when there is a risk of splashes.

Environmental exposure controls: None particular.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Appearance:	Colourless liquid
Odour:	Odourless
Odour threshold:	No available data
pH:	Neutral
Melting point / freezing point (°C):	~ 0
Initial boiling point and boiling range (°C):	~ 100
Decomposition temperature (°C):	No available data
Flash point (°C):	No available data
Evaporation rate:	No available data
Flammability (solid, gas):	Not relevant
Upper/lower flammability or explosive limits (vol.-%):	Not relevant
Vapour pressure (mbar, 25°C):	No available data
Vapour density (air=1):	No available data
Relative density (g/ml):	~ 1.0
Solubility:	Completely soluble in water
Partition coefficient: n-octanol/water, Log K _{ow} :	No available data
Auto-ignition temperature (°C):	No available data

SECTION 9: Physical and chemical properties (continued)

Viscosity:	No available data
Explosive/Oxidising properties:	Not relevant
9.2. Other information:	None relevant

SECTION 10: Stability and reactivity**10.1. Reactivity:**

No available data.

10.2. Chemical stability:

Stable under the recommended storage conditions - see section 7.

10.3. Possibility of hazardous reactions:

None known.

10.4. Conditions to avoid:

Excessive heating and direct sunlight.

10.5. Incompatible materials:

Strong oxidizing agents, reducing agents, strong acids and bases, heavy metals and salts. Sodium azide forms a very toxic gas (hydrogen azide) in contact with acids. Sodium azide may react with lead and copper, to form explosive metalazides.

10.6. Hazardous decomposition products:

When heated to high temperatures (decomposition) toxic gasses are formed such as oxides of nitrogen and carbon.

SECTION 11: Toxicological information**11.1. Information on toxicological effects:**

Hazard class	Data	Test	Data source
Acute toxicity:			
Inhalation	LC ₅₀ (rat) = 37 mg/m ³ (Sodium azide)	No info	RTECS
Dermal	LD ₅₀ (rabbit) = 20 mg/kg (Sodium azide)	No info	RTECS
Oral	LD _{Lo} (woman) = 14 mg/kg (Sodium azide)	No info	RTECS
	LD ₅₀ (rat) = 27 mg/kg (Sodium azide)	No info	RTECS
Corrosion/irritation:	No irritation, skin and eyes (Sodium azide)	No info	ECHA
Sensitization:	No skin sensitization, guinea pig (Sodium azide)	OECD 419	ECHA
CMR:	TD _{Lo} = 2730 mg/kg/78W (rat, continuous) "Equivocal tumorigenic agent" (Sodium azide)	No info	RTECS
	TD _{Lo} = 177.5 mg/kg (rat, 6-19 days after birth): "Effects on embryo or foetus" (Sodium azide)	No info	RTECS

Information on likely routes of exposure: inhalation, skin and ingestion.

Symptoms:

Inhalation: Vapours may cause irritation to the airways.

Skin: May cause irritation by prolonged contact with skin.

Eyes: May cause eye irritation.

Ingestion: May cause irritation of the gastrointestinal tract, nausea, vomiting and headache.

Chronic effects: Sodium azide in its pure form does affect the CNS, is a possible mutagen and have caused carcinogenic effect in rats. No conclusive data for humans.

SECTION 12: Ecological information**12.1. Toxicity:**

Aquatic	Data	Test (Media)	Data source
Fish	LC ₅₀ (Lepomis macrochirus, 96h) = 0.68 mg/l (Sodium azide)	No info	EPA Ecotox
Daphnia	EC ₅₀ (Daphnia pulex, 48h) = 4.2 mg/l (Sodium azide)	No info	EPA Ecotox
Algae	EC ₅₀ (Pseudokirchneriella subcapitata, 96h) = 0.35 mg/l (Sodium azide)	No info	EPA Ecotox

12.2. Persistence and degradability:

Sodium azide is an inorganic substance, methods for the determination of the biological degradation is not applicable to inorganic substances.

12.3. Bioaccumulative potential:

Sodium azide: Log K_{ow} < 1 - No significant bioaccumulative potential.

12.4. Mobility in soil:

No available/applicable data

12.5. Results of PBT and vPvB assessment:

No ingredients are PBT/vPvB, according to the criteria in REACH Annex XIII.

12.6. Other adverse effects:

None known

SECTION 13: Disposal considerations

13.1. Waste treatment methods:

The mixture is to be considered as non-hazardous waste. Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

EWC-code: 16 05 09 (mixture itself)
15 02 03 (paper towel, inert material etc. contaminated with the mixture)

SECTION 14: Transport information

Not dangerous goods (ADR/RID/IMDG/IATA).

14.1. UN-no.: None

14.2. UN proper shipping name: None

4.3. Transport hazard class(es): None

14.4. Packing group: None

14.5. Environmental hazards: No

14.6. Special precautions for user: None

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not relevant.

SECTION 15: Regulatory information

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

None

15.2. Chemical Safety Assessment:

No CSR.

SECTION 16: Other information

Hazard statements mentioned in section 2 and 3:

H300: Fatal if swallowed.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

EUH032: Contact with acids liberates very toxic gas.

Abbreviations:

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC₅₀ = Effect Concentration 50%

FW = Fresh Water

LC₅₀ = Lethal Concentration 50%

LD₅₀ = Lethal Dose 50%

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Literature:

ECHA = European Chemicals Agency

EPA Ecotox = The US Environmental Protection Agency's database on ecotoxicological effects for chemicals.

IUCLID = International Uniform Chemical Information Database.

RTECS = Register of Toxic Effects of Chemical Substances

Training advice:

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

Other information:

Prepared based on the information available to Alttox A/S as of July 2019.

Changes since the previous edition:

Not relevant

Prepared by: Alttox a/s – Tonsbakken 16-18 - 2740 Skovlunde - Phone +45 - 38 34 77 98 / PW - Quality control: PH