

SAFETY DATA SHEET

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

1. Identification of the substance/mixture and of the company/undertaking

Product identifier:**Solution 16 – Propidium µg/mL****Relevant identified uses of the substance or mixture and uses advised against:**

Aqueous preparation for research and analysis.

Details of the supplier of the safety data sheet:

ChemoMetec A/S

Gydevang 43 Phone.: (+45) - 48 13 10 20

DK - 3450 Alleroed Fax: (+45) - 48 13 10 21

Denmark e-mail: contact@chemometec.com

Responsible person for the safety data sheet (e-mail): ChemoMetec A/S (contact@chemometec.com)

Emergency telephone number:

(+45) - 48 13 10 20 (within office hours)

2. Hazards identification

Classification of the substance or mixture:

ALTox a/s has concluded that the mixture is not to be classified according to EC (67/548 or 1999/45) and CLP (1272/2008).

Label elements:EC/CLP:

None.

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.

3. Composition/information on ingredients

Mixtures:**Product description:** Water and various active ingredients below classification limit and:

% w/w	Substance name	CAS-no.	EC-no.	Index-no.	REACH reg.-no.	Classification
<0.1	Propidium Iodide (C ₂ 7H ₃ 4I ₂ N ₄)	25535-16-4	247-081-0	-	-	*
0.01	Sodium azide (NaN ₃)	26628-22-8	247-852-1	011-004-00-7	-	*

* Classification is not relevant, because the ingredients are well below the classification limit.

4. First-aid measures

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: Flush with water or physiological salt water for at least 5 minutes. If irritation persists: Seek medical advice.

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

Most important symptoms and effects, both acute and delayed:

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

Indication of any immediate medical attention and special treatment needed:

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

5. Fire-fighting measures

Extinguishing media:

Not flammable.

Special hazards arising from the substance or mixture:

Not relevant (the product is not combustible).

Advice for firefighters:

When extinguishing surrounding fires use breathing apparatus with an independent source of air.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use gloves of rubber when spill is wiped up – see section 8.

Environmental precautions:

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

Methods and material for containment and cleaning up:

Take up with wet paper. Clean with water. Further handling of spillage - see section 13.

Sodium azide may react with lead and copper, to form explosive metal azides – see section 10. If the product enters the drain, flush immediately with large amounts of water to avoid azide accumulation.

Reference to other sections:

See references above.

7. Handling and storage

Precautions for safe handling:

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

Conditions for safe storage, including any incompatibilities:

Store in an airtight container at a temperature between 2-7°C.

Specific end use(s):

See section 1.

8. Exposure controls/Personal protection

Control parameters:

Occupational exposure limits (Denmark): 0.1 mg/m³ EH (Natriumazid = Sodium azide)

DNEL: No CSR.

PNEC: No CSR.

Exposure controls:

Appropriate engineering controls: None particular.

Personal protective equipment:

Inhalation: Respiratory equipment is normally not required.

Skin: Wear protective gloves of nitril or butyl rubber. Breakthrough time: Approximately 3 hours.

Eyes: Wear safety goggles when risk of eye contact.

Environmental exposure controls: None particular.

9. Physical and chemical properties

Information on basic physical and chemical properties:

Appearance:	Red 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):	No available data
Upper/lower flammability or explosive limits (vol-%):	No available data
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
Viscosity:	No available data
Explosive properties:	Not relevant
Oxidising properties:	Not relevant

Other information:

None relevant

10. Stability and reactivity

Reactivity:

No available data.

Chemical stability:

Stable under the recommended storage conditions (see section 7).

Possibility of hazardous reactions:

None known.

Conditions to avoid:

Excessive heating.

Incompatible materials:

Sodium azide forms a very toxic gas (Hydrogen azide) in contact with acids. Sodium azide may react with lead and copper, to form explosive metal azides..

Hazardous decomposition products:

When heated to high temperatures (decomposition) it emits toxic fumes.

11. Toxicological information

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 available or applicable data.	-	-
Sensitization:	No available or applicable data.	-	-
CMR:	For natriumazid:		
	TD _{Lo} = 2730 mg/kg/78W (rat, continuous)	No info.	RTECS
	“Equivocal tumorigenic agent”		
	TD _{Lo} = 177,5 mg/kg (rat, 6-19 days after birth):	No info.	RTECS
	“Effects on embryo or fetus”.		
	No applicable data on mutagenicity.	-	-

Information on likely routes of exposure: Skin, lungs and gastrointestinal tract.

Symptoms:

Inhalation: Vapours may cause slight irritation to the airways.

Skin: May cause slight irritation by prolonged contact with skin.

Eyes: May cause slight irritation with redness.

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 fore humans.

12. Ecological information

Toxicity:

Sodium azide is very toxic to the aquatic environment.

Aquatic	Data	Test (Media)	Data source
Fish	LC ₅₀ (Lepomis macrochirus, 96h) = 0,68 mg/l (Sodium azide)	No info. (FW)	EPA Ecotox
Daphnia	EC ₅₀ (Daphnia pulex, 48h) = 4,2 mg/l (Sodium azide)	No info. (FW)	EPA Ecotox
Algea	EC ₅₀ (Pseudokirchneriella subcapitata, 96h) = 0,35 mg/l (Sodium azide)	No info. (FW)	EPA Ecotox

Persistence and degradability:

Sodium azide is an inorganic substance and therefore not a subject to the degradability testing.

Bioaccumulative potential:

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

Mobility in soil:

No available or applicable data.

Results of PBT and vPvB assessment:

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

Other adverse effects:

None known.

13. Disposal considerations

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) and 15 02 03 (Paper towel, inert material etc. contaminated with the mixture)

14. Transport information

Not dangerous goods according to ADR/RID.

UN-no.: UN proper shipping name:

Transport hazard class(es):

Packing group:

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Environmental hazards: None.

Special precautions for user: None.

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

15. Regulatory information

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

None.

Chemical Safety Assessment:

No CSR.

16. Other information

Hazard statements mentioned in section 2 and 3:

None.

Abbreviations:

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

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.

Changes since the previous edition:

Not relevant.

Prepared by: ALTox a/s – Tonsbakken 16-18 - 2740 Skovlunde - Phone +45 - 38 34 77 98 - Fax: +45 - 38 34 77 99 / PW - Quality control: SNS