

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:**

Solution 12 – DAPI 500 µg/mL

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:

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.comResponsible person for the safety data sheet (e-mail): contact@chemometec.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
<0.1	DAPI dilactate	28718-91-4	-	-	-	Muta 1A;H340
0.01	Sodium azide	26628-22-8	247-852-1	011-004-00-7	-	Acute Tox. 2;H300 Aquatic Acute 1;H400 Aquatic Chronic 1;H410 EUH032

DAPI dilactate: 4',6-diamidino-2-phenylindole, dilactate.

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 15 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 (EH40/2005):

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)

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:	~ 7
Melting point / freezing point (°C):	~ 0
Initial boiling point and boiling range (°C):	~ 100
Decomposition temperature (°C):	No available data
Flash point (°C):	>100
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:	Miscible
Partition coefficient: n-octanol/water, Log K _{ow} :	No available data
Auto-ignition temperature (°C):	No available data
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, sodium and carbon, hydrogen chloride and phosgene.

SECTION 11: Toxicological information

11.1. Information on toxicological effects:

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

Information on likely routes of exposure: Lungs, 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. DAPI dilactate may cause genetic defects.

SECTION 12: Ecological information

12.1. Toxicity:

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

H340: May cause genetic defects.

H400: Very toxic to aquatic life.

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

EUH032: Contact with acids liberates very toxic gas.

EUH210: Safety data sheet available on request.

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 April 2016.

Changes since the previous edition:

1-16