

**Material Safety data sheet
according to 1907/2006/EC, Article 31**

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- Trade name: Epoxy embedding medium, hardener DDSA
- Article number: 51-1625-0225
- CAS Number: 26544-38-7 • EC number: 247-781-6
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
Laboratory chemicals, Manufacture of substances.
- Application of the substance / the preparation: Hardener for epoxy resins

• 1.3 Details of the supplier of the safety data sheet Supplier:

Oxford Instruments NanoAnalysis
Halifax Rd, High Wycombe HP12 3SE
United Kingdom
Tel: +44 (0) 1494 442255

- Further information obtainable from: Technical Support

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

- Hazard pictograms GHS07
- Signal word Warning
- Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

- Precautionary statements

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P337+P313 If eye irritation persists: Get medical advice/attention

2.3 Other hazards

- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

Trade name: Epoxy embedding medium, hardener DDSA

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation: Substances

- CAS No. Description
26544-38-7 Epoxy embedding medium, hardener DDSA
- Identification number(s)
- EC number: 247-781-6

SECTION 4: First Aid Measures

4.1 Description of first aid measures

- General information:

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

- After inhalation:

No adverse effects are anticipated from inhalation. If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

- After skin contact:

Wash with water and soap and rinse thoroughly.

Wash off with soap and plenty of water. Consult a physician.

- After eye contact: Rinse opened eye under running water. If symptoms persist, consult a doctor. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

- After swallowing:

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

- 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting Measures

5.1 Extinguishing media

- Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- 5.2 Special hazards arising from the substance or mixture Carbon oxides.

- 5.3 Advice for firefighters

- Protective equipment:

Wear self contained breathing apparatus for fire fighting if necessary.

Trade name: Epoxy embedding medium, hardener DDS

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
- 6.2 Environmental precautions:
 Do not allow to enter sewers/ surface or ground water. Do not let product enter drains.
 - 6.3 Methods and material for containment and cleaning up:
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, saw-dust). Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
 - 6.4 Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
 Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.
- Information about fire - and explosion protection: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
 Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
- Storage: Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

- 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists valid during the making were used as basis.
- 8.2 Exposure controls
- Personal protective equipment: General protective and hygienic measures:
 Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing, Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.
 Handle in accordance with good industrial hygiene and safety practice.
 Wash hands before breaks and at the end of workday.

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 airrespirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
 Protection of hands: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Trade name: Epoxy embedding medium, hardener DDSA

SECTION 8: CONTINUED...

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. 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.

• **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Full contact:

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 480 min

Splash contact: Material: Nitrile rubber

Minimum layer thickness: 0.2 mm

Break through time: 60 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

• Penetration time of glove material; The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• **Eye protection:** Tightly sealed goggles

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).

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

• Limitation and supervision of exposure into the environment Do not let product enter drains

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

• General Information: Appearance: Form: Viscous, Colour: Clear

• Odour: no data available. Odour threshold: Not determined.

• pH-value: Not determined.

• Change in condition: Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: 150 °C (at 4 hPa) Flash point: 113 °C (closed cup)

• Flammability (solid, gas): Not applicable.

• Decomposition temperature: Not determined.

• Auto-ignition temperature: Not determined.

• Explosive properties: Product does not present an explosion hazard.

• Explosion limits: Lower: Not determined. Upper: Not determined.

• Vapour pressure: Not determined.

• Density at 20 °C: 1 g/cm³

• Relative density Not determined.

• Vapour density Not determined.

• Evaporation rate Not determined.

• Solubility in / Miscibility with water: Not determined.

• Partition coefficient: n-octanol/water: Not determined.

• Viscosity: Dynamic: Not determined. Kinematic: Not determined.

Trade name: Epoxy embedding medium, hardener DDSA

SECTION 10: Stability and Reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability Stable under recommended storage conditions.
 - Thermal decomposition / conditions to be avoided:
 No decomposition if used according to specifications.
 - 10.3 Possibility of hazardous reactions No dangerous reactions known.
 - 10.4 Conditions to avoid No further relevant information available.
 - 10.5 Incompatible materials: Strong oxidising agents, Amines, Bases.
 - 10.6 Hazardous decomposition products: No dangerous decomposition products known

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
 - Skin corrosion/irritation: Causes skin irritation.
 - Serious eye damage/irritation
 Causes serious eye irritation.
 - Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
 - Other information (about experimental toxicology): Blurred vision, Dermatitis, Sneezing.
 - Additional toxicological information:
 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
 - CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
 - Germ cell mutagenicity Based on available data, the classification criteria are not met.
 - Carcinogenicity Based on available data, the classification criteria are not met.
 - Reproductive toxicity Based on available data, the classification criteria are not met.
 - STOT-single exposure Based on available data, the classification criteria are not met.
 - STOT-repeated exposure Based on available data, the classification criteria are not met.
 - Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: : Ecological information

- 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
 - 12.2 Persistence and degradability No further relevant information available.
 - 12.3 Bioaccumulative potential No further relevant information available.
 - 12.4 Mobility in soil No further relevant information available.
 - Additional ecological information: General notes:
 Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
 - 12.5 Results of PBT and vPvB assessment
 - PBT: Not applicable.
 - vPvB: Not applicable.
 - 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal Considerations

- 13.1 Waste treatment methods
- Recommendation
 Must not be disposed together with household garbage. Do not allow product to reach sewage system.
 Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
 - Recommendation: Disposal must be made according to official regulations.

Trade name: Epoxy embedding medium, hardener DDSA

SECTION 14: Transport information

- 14.1 UN-Number
- ADR, IMDG, IATA Void
- 14.2 UN proper shipping name: NOT DANGEROUS GOODS
- ADR, IMDG, IATA Void
- 14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA
- Class Void
- 14.4 Packing group
- ADR, IMDG, IATA Void
- 14.5 Environmental hazards: Marine Polutant: NO.
- 14.6 Special precautions for user Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.
- UN "Model Regulation": Void

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I Substance is not listed.
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out

SECTION 16: OTHER

This information is based on our present knowledge and should assist the user with the safe handling of this material when properly applied. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: Sales department

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

- * Data compared to the previous version altered.