



CONDUCTIVE EPOXY ADHESIVE 3985

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING


Product Detail : 3985 Conductive epoxy adhesive
 Application of the substance / the preparation: Hardener
 Manufacturer / supplier: Holland Shielding Systems B.V.
 Jacobus Lipsweg 124
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 the Netherlands
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2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification under CLP	Skin Corr. 1A: H314;-: EUH208
Most important adverse effects	Contains 2,2'-iminodiethylamine. May produce an allergic reaction. Causes severe skin burns and eye damage.

2.2. Label elements

Label elements	
Hazard statements	EUH208: Contains 2,2'-iminodiethylamine. May produce an allergic reaction. H314: Causes severe skin burns and eye damage
Hazard pictograms	GHS05: Corrosion 
Signal word	Danger
Precautionary statements:	P260: Do not breathe dust/fumes/gas/mist/vapours/spray. P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Hazardous ingredients:

SILVER

EINECS	CAS	PBT / WEL	CLP Classification	Percent
231-131-3	7440-22-4	-	-	70-90%

MODIFIED AMINE

-	68584-12-3	-	Skin Corr. 1A: H314; Skin Corr. 1B: H314; Skin Corr. 1C: H314	10-30%
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2,2'-IMINODIETHYLAMINE

203-865-4	111-40-0	-	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317	<1%
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Revision date: 12-07-2017

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4. FIRST AID MEASURES

4.1. Description of first aid measures

Skin contact	Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.
Eye contact	Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
Ingestion	Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.
Inhalation	Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

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

Skin contact	Blistering may occur. Progressive ulceration will occur if treatment is not immediate.
Eye contact	Corneal burns may occur. May cause permanent damage.
Ingestion	Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.
Inhalation	There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.
Delayed / immediate effects	Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment	Eye bathing equipment should be available on the premises.
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5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media	Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.
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5.2. Special hazards arising from the substance or mixture

Exposure hazards	Corrosive. In combustion emits toxic fumes
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5.3. Advice for fire-fighters

Advice for fire-fighters	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.
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6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Notify the police and fire brigade immediately. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing- see section 8 of SDS. Do not create dust.
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6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or rivers
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6.3. Methods and material for containment and cleaning up

Clean-up procedures

Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections

Refer to section 8 of SDS.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling requirements

Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

Store in a cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s)

No data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Hazardous ingredients:

2,2'-IMINODIETHYLAMINE

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	4.3 mg/m3	-	-	-

DNEL/PNEC Values

DNEL / PNEC

No data available

8.2. Exposure controls

Engineering measures

Respiratory protection

Hand protection

Eye protection

Skin protection

Ensure there is sufficient ventilation of the area.

Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter.

Protective gloves.

Tightly fitting safety goggles. Ensure eye bath is to hand.

Protective clothing.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

State	Paste
Colour	Silver
Odour	Characteristic odour
Evaporation rate	Negligible
Solubility in water	Insoluble
Also soluble in	Ethanol. Acetone. Benzene. Petroleum ether.
Viscosity	Highly viscous

9.2. Other information

Other information:

No data available.

10. STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity	Stable under recommended transport or storage conditions.
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10.2. Chemical stability

Chemical stability	Stable under normal conditions.
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10.3. Possibility of hazardous reactions

Hazardous reactions	Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.
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10.4. Conditions to avoid

Conditions to avoid	Heat.
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10.5. Incompatible materials

Materials to avoid	Strong oxidising agents. Strong acids.
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10.6. Hazardous decomposition products

Haz. decomp. products	In combustion emits toxic fumes.
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11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Hazardous ingredients:

2,2'-IMINODIETHYLAMINE



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IPR	RAT	LD50	74	mg/kg
ORL	MUS	LD50	970	mg/kg
ORL	RAT	LD50	970	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

Skin contact	Blistering may occur. Progressive ulceration will occur if treatment is not immediate.
Eye contact	Corneal burns may occur. May cause permanent damage.
Ingestion	Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.
Inhalation	There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.
Delayed / immediate effects	Immediate effects can be expected after short-term exposure.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity values	No data available.
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12.2. Persistence and degradability

Persistence and degradability	Biodegradable.
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12.3. Bioaccumulative potential

Bioaccumulative potential	No bioaccumulation potential.
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12.4. Mobility in soil

12.5. Results of PBT and vPvB assessments

PBT identification	This product is not identified as a PBT/vPvB substance.
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12.6. Other adverse effects

Other adverse effects	Negligible ecotoxicity.
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13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal operations	Transfer to a suitable container and arrange for collection by specialised disposal company.
Recovery operations	Recycling/reclamation of metals and metal compounds.
Waste code number	08 04 09
Disposal of packaging	Dispose of as normal industrial waste.
NB	The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

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14. TRANSPORT INFORMATION

Transport class	This product does not require a classification for transport.
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15. REGULATORY INFORMATION

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

Specific regulations	Not applicable.
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15.2. Chemical Safety Assessment

Chemical safety assessment:	A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.
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16. OTHER INFORMATION

Other information	This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. * indicates text in the SDS which has changed since the last revision.
Phrases used in s.2 and s.3	EUH208: Contains <name of sensitising substance>. May produce an allergic reaction. H302: Harmful if swallowed. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye damage. H317: May cause an allergic skin reaction.
Legal disclaimer	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.