

SAFETY DATA SHEET

according to Regulation (EU) No. 1907/2006

S&P Resin 230 (Comp. B)

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

Use of the Substance/Preparation	Hardener for epoxy resin
Company/Undertaking Identification	S&P Reinforcement International AG Seewernstrasse 127 CH-6440 Seewen/SZ Switzerland +41 41 825 00 70 / info@sp-reinforcement.eu (8 – 17 h)
Emergency telephone number	145 / +41 44 251 51 51 (Swiss Toxicological Info Center - 24h)
Revision Date	14.04.2011
Version	1

2. Hazards identification



C - Corrosive.

Causes burns. May cause sensitisation by skin contact. May cause sensitisation by inhalation and skin contact.

3. Composition/information on ingredients

Chemical characterization Adhesive.

Components		Symbol(s)	R-phrases(s)	CAS	EINECS
Poly (oxypropylene) diamine	20% - 25%	C	R-34	9046-10-0	
piperazine [solid]	1% - 2.5%	Xn,C	R-34-42/43-62-63	110-85-0	203-808-3
3,6-diazaoctanethylenediamin; triethylenetetramine	20% - 25%	C	R-21-34-43-52/53	112-24-3	203-950-6

4. First aid measures

Inhalation	Move to fresh air.
Skin contact	Wash off immediately with soap and plenty of water. Remove contaminated clothes and shoes. Consult a physician for severe cases.
Eye contact	Rinse immediately with plenty of water, also under the eyelids. Consult an ophthalmologist.
Ingestion	Rinse mouth. Do not induce vomiting without medical advice. Consult a physician for severe cases.

5. Fire-fighting measures

Suitable extinguishing media	Use dry chemical, CO ₂ , water spray or alcohol foam.
Special protective equipment for firefighters	Standard procedure for chemical fires.
Specific methods	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

6. Accidental release measures

Personal precautions	Avoid contact with skin and eyes. Ensure adequate ventilation.
Environmental precautions	Do not flush into surface water or sanitary sewer system.
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. Handling and storage

Handling	Avoid contact with skin and eyes.
Storage	Keep tightly closed in a dry and cool place.

8. Exposure controls / personal protection

EU	Piperazine PEL (Permissible Exposure Limit) 0.1 mg/m ³ PEL (Permissible Exposure Limit) - ppm STEL (Short Term Exposure Limit) 0.3 mg/m ³ STEL (Short Term Exposure Limit) - ppm
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Occupational exposure controls	Handle in accordance with good industrial hygiene and safety practice.
Personal protection equipment	
Respiratory protection	Breathing apparatus needed only when aerosol or mist is formed. Respirator with A/P2 filter.
Hand protection	Gloves made of Nitril. Protective gloves complying with EN 374. Break through time: 1 h.
Eye protection	Safety glasses with side-shields conforming to EN 166. Eye wash bottle with pure water.
Skin and body protection	Long sleeved clothing.

9. Physical and chemical properties

Form	Liquid. Viscous.
Colour	Black.
Odour	Amine-like.
Physical and chemical properties	pH > 10 . Flash point: > 100 °C. Water solubility: partly soluble Fat solubility: partly soluble Melting point/range – not determined. Boiling point/range – not determined. Density 1.6 g/ml. Explosion limits: not applicable.

10. Stability and reactivity

Stability	Stable at normal conditions. No decomposition if used as directed.
Conditions to avoid	Direct sources of heat.
Materials to avoid	Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.
Hazardous decomposition products	None reasonably foreseeable.

11. Toxicological information

Acute toxicity	Poly (oxypropylene) diamine LD50/oral/rat = 2880 mg/kg. LD50/dermal/rabbit = 2980 mg/kg. Piperazine LD50/dermal/rabbit = 4000 mg/kg. LD50/oral/rat = 2600 mg/kg. triethylenetetramine LD50/dermal/rabbit = 805 mg/kg. LD50/oral/rat = 2500 mg/kg.
Local effects	Causes burns.
Long term toxicity	No data is available on the product itself.
Sensitization	May cause sensitisation by skin contact.

12. Ecological information

Ecotoxicity	No data is available on the product itself.
Results of PBT assessment	This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
Other adverse effects	water contaminating (WGK-D : 2 – self estimation).

13. Disposal considerations

Waste from residues / unused products	European Waste catalogue code (EWC-code): 08 01 11. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport information

ADR/RID	<p>Proper shipping name POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3,6-diazaoctanethylenediamin; triethylenetetramine, Poly (oxypropylene) diamine) UN No 2735. Class 8. Packing group II. ADR/RID-Labels 8. Classification code C7. Risk No. 80. Limited quantities LQ22. Tunnel code 2 (E)</p>
IMO	<p>Proper shipping name Polyamines, liquid, corrosive, n.o.s. (3,6-diazaoctanethylenediamin; triethylenetetramine, Poly (oxypropylene) diamine) UN No 2735. Class 8. Packing group II. ADR/RID-Labels 8. Limited quantities 1 L. EmS F-E, S-B.</p>
ICAO	<p>Proper shipping name Polyamines, liquid, corrosive, n.o.s. * (3,6-diazaoctanethylenediamin; triethylenetetramine, Poly (oxypropylene) diamine) UN No 2735. Class 8. Packing group II. Packing instruction (passenger aircraft): 808 (1 L). Packing instruction (LQ): Y808 (0.5 L). Packing instruction (cargo aircraft): 812 (30 L).</p>

15. Regulatory information

Symbol(s)	C - Corrosive.
R-phrased(s)	<p>R34: Causes burns. R43: May cause sensitisation by skin contact. R42/43: May cause sensitisation by inhalation and skin contact.</p>
S-phrased(s)	<p>S1/2: Keep locked up and out of the reach of children. S24: Avoid contact with skin. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.</p>
Hazardous components which must be listed on the label	<p>3,6-diazaoctanethylenediamin; triethylenetetramine, CAS-No. 112-24-3, EC-No. 203-950-6 Poly (oxypropylene) diamine, CAS-No. 9046-10-0 piperazine [solid], CAS-No. 110-85-0, EC-No. 203-808-3</p>

Regulatory Information

Classification according to EC directive.
VOC (CH) = 0%

16. Other information

Recommended use

For industrial application only.

Text of R phrases mentioned in Section 3

R21: Harmful in contact with skin.
R34: Causes burns.
R43: May cause sensitisation by skin contact.
R62: Possible risk of impaired fertility.
R63: Possible risk of harm to the unborn child.
R42/43: May cause sensitisation by inhalation and skin contact.
R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Further information

Take notice of the directions of use on the label. (M)SDS sections updated: 3-15.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.