

Safety Data Sheet

according to Regulation (EU) No. 1907/2006

Basco Hardener (954190-X)

Print date : 06.01.2008

Product code : 954190-X

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

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Use of the substance/preparation

SP crosslinking agent/hardener

Company/undertaking identification

Company name : R&G Faserverbundwerkstoffe GmbH
 Composite Technology
 Street : Im Meißel 7 + 13
 Place : D-71111 Waldenbuch
 Post-office box : 1145
 D-71107 Waldenbuch
 Telephone : +49-7157-530460
 Telefax : +49-7157-530470
 e-mail : info@r-g.de
 Internet : www.r-g.de
 Inquiry office : Management
 Emergency telephone : Poison emergency call

2. Hazards identification**Classification**

Indications of danger : Irritant
 R-phrases :
 Flammable.
 May cause sensitization by skin contact.
 Repeated exposure may cause skin dryness or cracking.
 Vapours may cause drowsiness and dizziness.

3. Composition/information on ingredients**Chemical characterization (preparation)****Hazardous components**

EC-No.	CAS-No.	Chemical name	Quantity	Classification
		Hexamethylen-1,6-diisocyanat homopolymer	25 - 50 %	Xi R43
203-603-9	108-65-6	2-methoxy-1-methylethyl acetate	10 - 25 %	Xi R10-36
265-199-0	64742-95-6	Low boiling point naphtha - unspecified, Solvent naphtha (petroleum), light arom.	10 - 25 %	Carc. Cat. 2, Xn R45-65
212-485-8	822-06-0	hexamethylene-di-isocyanate	0,1 - 1 %	T, Xi R23-36/37/38-42/43

Full text of each relevant R phrase can be found in heading 16.

4. First aid measures**General information**

Consult a doctor when symptoms occur or in cases of doubt. Do not introduce anything into the mouth of an unconscious person.

After inhalation

Move victim to fresh air. Instruct person to keep calm and warm. Artificial respiration on respiratory arrest. If victim is at risk of losing consciousness, position and transport on their side. Consult physician.

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After contact with skin

Change contaminated clothing. After contact with skin, wash immediately with soap and plenty of water. Do not use any solvents or diluents!

After contact with eyes

If the product comes into contact with the eyes, immediately rinse the open eyes with copious amounts of water for at least ten minutes. Afterwards consult an eye specialist.

After ingestion

Immediately get medical attention. Keep the patient calm. Do not induce vomiting.

5. Fire-fighting measures**Suitable extinguishing media**

alcohol resistant foam. Carbon dioxide (CO₂). Extinguishing powder. Water spray.

Extinguishing media which must not be used for safety reasons

High power water jet.

Special exposure hazards arriving from substance or preparation itself, combustion products, resulting gases

Fire gives rise to dense black smoke. In case of fire and/or explosion do not breathe fumes.

Special protective equipment for fire-fighters

Use appropriate respiratory protection.

Additional information

Cool affected receptacles with water. Contaminated fire-fighting water must not get into the sewerage network.

6. Accidental release measures**Personal precautions**

Remove from all sources of ignition. Provide adequate ventilation. Do not breathe in vapours.

Environmental precautions

Do not empty into drains or the aquatic environment. Do not allow to enter the soil or subsoil. Notify the responsible authority when the substance enters open water, the soil, or sewerage system.

Methods for cleaning up/taking up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the assimilated material according to the section on waste disposal.

Suitable solvent: 50% ethanol / isopropanol, 45% water, 5% ammoniac solution (density 0.88).

FLAMMABLE!

Suitable solvent: 95% water, 4.8% sodium carbonate, 0.2% wetting agent! NOT FLAMMABLE!

Leave spilled product residue in unsealed receptacles for a number of days until there is no longer any reaction.

7. Handling and storage**Handling****Advice on safe handling**

Keep away from ignition sources and naked flames. Take precautionary measures against static discharges. Earth receptacles. Wear antistatic work clothing. Only use anti-static equipped (spark-free) tools. Avoid contact with skin and eyes. Do not breathe in vapours or spray mists. When using do not eat, drink or smoke.

Advice on protection against fire and explosion

Concentrated vapors are heavier than air. Fumes may form explosive mixtures with air.

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Further information on handling

This product must not be handled by persons with allergies, asthma, persistent or chronic breathing problems, or chronic diseases of the respiratory tract.

Storage**Requirements for storage rooms and vessels**

Electrical equipment and operating resources must comply with the state of the art. Take precautionary measures against static discharges. Keep away from ignition sources and naked flames. Keep receptacles tightly sealed. Keep opened receptacles upright to prevent leakage.

Advice on storage compatibility

Keep away from: acid. Oxidizing agents. Base. amines. Alcohols. Water.

Further information on storage conditions

Store only in original container. Keep in well sealed receptacles at a cool, dry location. Keep away from ignition sources and naked flames.

Do not store at temperatures over: 25°C

Do not store at temperatures under: 10°C

Prevent effects from air humidity/water! CO₂ formation causes excess pressure in sealed receptacles.

8. Exposure controls/personal protection**Exposure limit values****Exposure limits (EH40)**

CAS No.	Substance	ml/m ³	mg/m ³	F/ml	Category	Origin
108-65-6	1-Methoxypropyl acetate	50	274		TWA (8 h)	WEL
		100	548		STEL (15 min)	WEL
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
		200	966		STEL (15 min)	WEL

Exposure controls**Occupational exposure controls**

Ventilate adequately storage and work rooms.

Respiratory protection

During spraying wear equipment with own air supply. Respiratory equipment for high concentrations. Filter respirator (full mask or mouth-piece) with filter: A2P2

Hand protection

Wear protective gloves. (EN 374)
glove thickness: min. 0,75 mm
penetration time: > 480 min

Eye protection

Tightly sealed safety glasses. (EN 166)

Skin protection

antistatic.

9. Physical and chemical properties**General information**

Physical state : liquid
Colour : colourless
Odour : characteristic

Important health, safety and environmental information

Test method

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Changes in the physical state

Flash point :	32 °C	DIN 53213
Lower explosion limits :	0,8 vol. %	
Upper explosion limits :	7,6 vol. %	
Vapour pressure :	5 hPa	
(at 20 °C)		
Density (at 20 °C) :	0,98 g/cm ³	
Water solubility :	insoluble	

Solvent separation test

< 3% ADR/RID

Solvent content

61 %

Other information

Ignition temperature : 333 °C

10. Stability and reactivity**Conditions to avoid**

Stabile under the specified storage conditions.

Materials to avoid

reaction with strong acids, alkaline substances, amines, and oxidising agents to form hydrogen The formulation reacts slowly with water, releasing carbon dioxide in the process. The buildup of pressure in sealed receptacles can cause them to deform, bulge, and in extreme causes rupture.

Hazardous decomposition products

High temperatures can give rise to hazardous decomposition products. smoke. Carbon monoxide. Carbon dioxide. nitrogen oxides (NOx). hydrocyanic acid Isocyanates. amines. alcohols.

11. Toxicological information**Empirical data on effects on humans**

Inhaling solvent fractions above the air limit can cause damage to health, e.g. irritation to the mucous membranes and respiratory organs and damage to the liver, kidneys, and central nervous system. The typical signs are headaches, dizziness, fatigue, muscle weakness, numbness, and in serious cases unconsciousness. The typical signs are headaches, dizziness, fatigue, muscle weakness, numbness, and in serious cases unconsciousness. Solvents can cause some of the above effects through skin resorption. Repeated and sustained skin contact can cause demodestrisation and irritation. Sprays may cause irritation to the eye and reversible damage.

This product may cause acute irritation and/or sensitisation in the respiratory tract leading to a cramped feeling in the chest, shortness of breath, and asthmatic complaints. After sensitisation, even concentrations below the industrial limits can cause signs of asthma.

Further information

The product has not been tested as such. The formulation has been classified according to the conventional method (calculating regulations under EU Directive 1999/45/EG) and the toxicological risks.

12. Ecological information**Ecotoxicity**

Do not let the product enter the groundwater, open water, or the sewerage system. The formulation was assessed according to the conventional method of the directive 1999/45/EG and classified as not harmful to the environment.

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13. Disposal considerations**Advice on disposal**

Do not allow to enter the sewerage system.

Waste disposal number of used product

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other dangerous substances
Classified as hazardous waste.

Contaminated packaging

Uncontaminated packaging can be recycled. Noncleanable packaging must be disposed of like the substance.

14. Transport information**Land transport (ADR/RID)**

UN number : 1263
ADR/RID class : 3
Warning plate
Hazard-no. : 30
Hazard label : 3
ADR/RID packing group : III

Description of the goods

FARBE (einschließlich Farbe, Lack, Emaille, Beize, Schellack, Firnis, Politur, flüssiger Füllstoff und flüssige Lackgrundlage) oder FARBZUBEHÖRSTOFFE (einschließlich Farbverdünnung und -lösemittel)

Marine transport

UN number : 1263
IMDG code : 3
Marine pollutant : p
Hazard label : 3
IMDG packing group : III
EmS : F-E, S-E

Description of the goods

PAINT

Air transport

UN/ID number : 1263
ICAO/IATA-DGR : 3
Hazard label : 3
ICAO packing group : III

Description of the goods

paint and paint related material

15. Regulatory information**Labelling**

Danger symbols : Xi - Irritant

R phrases

10 Flammable.
43 May cause sensitization by skin contact.

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- 66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.

S phrases

- 23 Do not breathe (gas/fumes/vapour/spray, appropriate wording to be specified by the manufacturer)
24 Avoid contact with skin.
37 Wear suitable gloves.
38 In case of insufficient ventilation, wear suitable respiratory equipment.
51 Use only in well-ventilated areas.

Special labelling for certain preparations

Contains Methyl-pentamethyl-4-piperidylsebacate. May produce an allergic reaction.

Additional advice on labelling

The product is classified and labelled under the EC Directives/hazardous substances laws (GefStoffV).

National regulatory information

- Employment restrictions : Observe employment restrictions for young people.; Observe employment restrictions for child bearing mothers and nursing.
Water contaminating class : 2 - water contaminating

Additional information

- BGR 190 "Benutzung von Atemschutzgeräten"
BGR 192 "Benutzung von Augen- und Gesichtsschutz"
BGR 195 "Einsatz von Schutzhandschuhen"

16. Other information

Full text of R-phrases referred to under sections 2 and 3

- 10 Flammable.
23 Toxic by inhalation.
36 Irritating to eyes.
36/37/38 Irritating to eyes, respiratory system and skin.
42/43 May cause sensitization by inhalation and skin contact.
43 May cause sensitization by skin contact.
45 May cause cancer.
65 Harmful: may cause lung damage if swallowed.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.

Other data

All information, recommendations, and advice on the part of R&G Faserverbundwerkstoffe GmbH are published to the best of our knowledge and belief. They are noncommittal and contain neither explicit nor tacit assurance or warranty of particular properties. The values specified for properties are typical figures. Recommendations or advice serve to describe our products and possible applications in a general or exemplary, but not specifically individual manner. In the course of the constant technical advancement and improvement of our products there may be changes to the characteristic values, copy, and diagrams; no specific reference is made to any such change. Owing to our products' wide and highly diverse range of potential applications far beyond any of our attempts to analyse, the customer alone is responsible for examining our products' suitability for the respective processes and purposes and their respective processibility. All and any protective rights and the applicable laws, terms, and conditions must be observed by the buyer or user of our products at their own responsibility. Publication is not a licence and does not intend the violation of any patents.