

Safety Data Sheet

according to Regulation (EC) No. 1907/2006

PUR hardener Desmodur 9804

Print date: 05.04.2011

Product code: 170146-2011

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

Identification of the substance or mixture

PUR hardener Desmodur 9804

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	
Responsible Department:	Management	
Emergency telephone:	poison information centre	

2. Hazards identification

Classification

Indications of danger : Harmful

R-phrases:

Harmful by inhalation.

Irritating to eyes, respiratory system and skin.

Limited evidence of a carcinogenic effect.

May cause sensitization by inhalation and skin contact.

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

GHS:

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory/skin sensitization: Resp. Sens. 1

Respiratory/skin sensitization: Skin Sens. 1

Carcinogenicity: Carc. 2

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements:

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

3. Composition/information on ingredients

Chemical characterization (Mixture)

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Hazardous components

EC No.	CAS No.	Chemical name	Quantity
		Classification	
		GHS classification	
202-966-0	101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	>= 50 %
		Carc. Cat. 3, Xn, Xi R40-20-48/20-36/37/38-42/43	
		Carc. 2, Acute Tox. 4, STOT RE 2, Eye Irrit. 2, STOT SE 3, Skin Irrit. 2, Resp. Sens. 1, Skin Sens. 1; H351 H332 H373 ** H319 H335 H315 H334 H317	

Full text of R- and H-phrases: see section 16.

4. First aid measures

General information

Take off immediately all contaminated clothing

After inhalation

In the case of inhalation of decomposition products, take the effected person into the fresh air and sit him quietly. Consult a doctor when there are visible signs of change on the skin or other complaints (if possible present the label or safety data sheet).

After contact with skin

After contact with skin, wash immediately with soap and plenty of water. After contact with skin, wash immediately with plenty of/ethanol.

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

If swallowed, do not induce vomiting: seek medical advice immediately and show this container label.

5. Fire-fighting measures

Suitable extinguishing media

Carbon dioxide (CO₂). Extinguishing powder. Water fog.

Extinguishing media which must not be used for safety reasons

High power water jet.

Special exposure hazards arising from substance or mixture itself, combustion products, resulting gases

Nitrogen oxides (NO_x). Carbon monoxide. Hydrocyanic acid.

Special protective equipment for fire-fighters

Wear a protective full body suit.

Additional information

Contaminated fire-fighting water must be collected separately. Contaminated fire-fighting water must not get into the sewerage network.

6. Accidental release measures

Personal precautions

Wear personal protection equipment. Guide people to safety.

Environmental precautions

Do not empty into drains or the aquatic environment.

Methods for cleaning up/taking up

Collect mechanically.

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7. Handling and storage

Handling

Advice on safe handling

Handle open container with care. Wear respiratory equipment when transferring large quantities without vapour extraction. Provide adequate room ventilation, if necessary with vapour extraction at the workplace.

Storage

Further information on storage conditions

Protect against the effects of heat and direct sunlight.

8. Exposure controls/personal protection

Exposure limit values

Exposure controls

Protective and hygiene measures

The usual precautionary measures for handling chemicals should be followed. Keep away from food, beverages and feed. Remove contaminated clothing immediately. Wash hands before breaks and after work. Store protective clothing. Avoid contact with eyes and skin. When using do not eat, drink, smoke or take drugs. Use barrier skin cream.

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment. Filter type AX-P2 (organic vapors, particles)

Hand protection

Material of gloves for long term application (BTT > 480 min): Butyl rubber, Ethylvinylalkohollaminat (EVAL), nitrile rubber, neoprene rubber, polyvinyl chloride (PVC). Material of gloves for short-term use / Pritzer (10 min < BTT < 480 min): Butyl rubber, Ethylvinylalkohollaminat (EVAL), nitrile rubber, polyvinyl chloride (PVC). There are in accordance with accepted standards such as for example EN 374 (Europe), F739 (U.S.) tested gloves are used. The suitability and durability of a glove is dependent on the use, eg the contact frequency and duration, the skill. Let us advise you always have the gloves. Additional information can for example be found under www.gisbau.de

Eye protection

Wear goggles. face protection

Skin protection

Wear protective clothing.

9. Physical and chemical properties

General information

Physical state: liquid
Colour: brown
Odour: product-specific

Important health, safety and environmental information

Test method

Changes in the physical state

Flash point: 100 °C
Density (at 20 °C): 1,12 bis 1,14 g/cm³
Water solubility: insoluble

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Viscosity / dynamic:
(at 25 °C)

177 mPa·s

10. Stability and reactivity

Materials to avoid

in some cases very violent reactions with: Water.

11. Toxicological information

Acute toxicity

Acute toxicity, oral rat LD50: > 2000 mg/kg

Acute toxicity, inhalant rat LC50: 370 mg/m³ 4h

12. Ecological information

Ecotoxicity

Acute fish toxicity Brachydanio rerio > 1000 mg/l 96h

Acute Daphnia toxicity Daphnia magna EC50: > 1000 mg/l 24h

Bacterial toxicity: EC50: > 100 mg/l 3h

13. Disposal considerations

Advice on disposal

Dispose of as hazardous waste. Waste key numbers are assigned according to the European Waste Catalogue (EWC) depending on the sector and process type.

Contaminated packaging

Contaminated packing must be completely emptied and can be re-used following appropriate cleaning. Uncontaminated packaging can be recycled.

14. Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

Not restricted

Marine transport

Other applicable information (marine transport)

Not restricted

Air transport

Other applicable information (air transport)

Not restricted

15. Regulatory information

Labelling

Danger symbols:

Xn - Harmful



Xn - Harmful

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R phrases

- 20 Harmful by inhalation.
36/37/38 Irritating to eyes, respiratory system and skin.
40 Limited evidence of a carcinogenic effect.
42/43 May cause sensitization by inhalation and skin contact.
48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

S phrases

- 23 Do not breathe Do not breath vapour. .
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
36/37 Wear suitable protective clothing and gloves.

GHS labelling

Signal word:

Danger

Pictograms:

exclamation mark; health hazard



Hazard statements

- H332 Harmful if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash ... thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P285 In case of inadequate ventilation wear respiratory protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatment (see ... on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P308+P313 IF exposed or concerned: Get medical advice/attention.

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P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container to

Special labelling of certain mixtures

Contains epoxy constituents. May produce an allergic reaction.

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

16. Other information

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

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Full text of H-Statements referred to under sections 2 and 3

H315 Causes skin irritation.
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H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)