

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**5 min.-epoxy (hardener)**

Revision date: 17.11.2017

Product code: 155110

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

5 min.-epoxy (hardener)

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Hardener (Crosslinker )

**1.3. Details of the supplier of the safety data sheet**

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 (0)7157 5304-60	Telefax: +49 (0)7157 5304-70
e-mail:	info@r-g.de	
Internet:	www.r-g.de	
Responsible Department:	Management	

**1.4. Emergency telephone number:** Vergiftungs-Informationen-Zentrale Freiburg  
Tel: +49 (0)761 19240

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Causes skin irritation.

Causes serious eye irritation.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

2,4,6-tris(dimethylaminomethyl)phenol

**Signal word:** Warning**Pictograms:****Hazard statements**

H319 Causes serious eye irritation.

H315 Causes skin irritation.

**Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

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.

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**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol			10-25%
	202-013-9	603-069-00-0		
	Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2; H302 H319 H315			

Full text of H and EUH statements: see section 16.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Remove contaminated clothing immediately.

**After inhalation**

consult a doctor.

**After contact with skin**

Immediately with water and soap and rinse thoroughly. If skin irritation occurs.

**After contact with eyes**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

**After ingestion**

Seek medical advice immediately.

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

The product does not contain any relevant quantities of substances with workplace-related limit values to be monitored.

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

No information available.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**Carbon dioxide (CO<sub>2</sub>), Extinguishing powder, Water spray jet.  
Fight major fires with a water spray jet or alcohol-resistant foam.**Unsuitable extinguishing media**

Full water jet

**5.2. Special hazards arising from the substance or mixture**

In case of fire may be liberated: Gases/vapours, toxic.

**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.

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Do not allow entering drains or surface water.

#### SECTION 6: Accidental release measures

##### **6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protection equipment.

##### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Do not allow to enter the soil or subsoil. Dilute with plenty of water.

##### **6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

##### **6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

#### SECTION 7: Handling and storage

##### **7.1. Precautions for safe handling**

###### **Advice on safe handling**

Provide adequate ventilation/vapour extraction at the workplace.

###### **Advice on protection against fire and explosion**

No special fire protection measures are necessary.

##### **7.2. Conditions for safe storage, including any incompatibilities**

###### **Requirements for storage rooms and vessels**

Keep/Store only in original container.

###### **Advice on storage compatibility**

Store separately from foodstuffs.

###### **Further information on storage conditions**

Keep receptacles tightly sealed.

##### **7.3. Specific end use(s)**

Hardener (Crosslinker )

#### SECTION 8: Exposure controls/personal protection

##### **8.1. Control parameters**

##### **8.2. Exposure controls**



###### **Protective and hygiene measures**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

###### **Eye/face protection**

Suitable eye protection: goggles.

###### **Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four

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control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable material: NBR (Nitrile rubber), FKM (fluoro rubber)

Thickness of the glove material: > 0,5mm

**Skin protection**

Wear suitable protective clothing.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. Filtering device (DIN EN 147) P2

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	light yellow
Odour:	rotten eggs

**Test method**

pH-Value:	not determined
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**Changes in the physical state**

Melting point:	not determined
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Initial boiling point and boiling range:	> 100 °C
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Flash point:	> 90 °C °C
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**Flammability**

Solid:	not applicable
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Gas:	not applicable
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**Explosive properties**

not explosive.

Lower explosion limits:	not determined
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Upper explosion limits:	not determined
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**Auto-ignition temperature**

Solid:	not applicable
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Gas:	not applicable
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Decomposition temperature:	not determined
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**Oxidizing properties**

Not oxidising.

Vapour pressure:	not determined
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Density (at 20 °C):	1,13 g/cm <sup>3</sup> ISO 2811-2
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Water solubility:	easily soluble
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**Solubility in other solvents**

not determined

Partition coefficient:	not determined
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Viscosity / dynamic: (at 25 °C)	10000 - 16000 mPa·s ISO 3219
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Vapour density:	not determined
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Evaporation rate:	not determined
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**9.2. Other information**

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Solid content:

not determined

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

Violent reaction with: Oxidising agent

**10.4. Conditions to avoid**

none

**10.5. Incompatible materials**

Oxidising agent

**10.6. Hazardous decomposition products**

Gases/vapours, toxic

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****ATEmix tested**

	Dose	Species	Source
LD50, oral	1200 mg/kg	rat	

**Acute toxicity**

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol				
	oral	ATE 500 mg/kg			

**SECTION 12: Ecological information****12.1. Toxicity**

According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as "dangerous for the environment".

**12.2. Persistence and degradability**

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.

**12.4. Mobility in soil**

The product has not been tested.

**12.5. Results of PBT and vPvB assessment**

The product has not been tested.

**12.6. Other adverse effects**

No information available.

**Further information**

No special environmental measures are necessary.

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**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

**Waste disposal number of waste from residues/unused products**

080299 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of other coatings (including ceramic materials); wastes not otherwise specified

**Contaminated packaging**

Wash with plenty of water. Completely emptied packages can be recycled.

**SECTION 14: Transport information****Land transport (ADR/RID)****14.1. UN number:** No dangerous good in sense of this transport regulation.**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.**14.4. Packing group:** No dangerous good in sense of this transport regulation.**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

No information available.

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

2004/42/EC (VOC): 19 % (214,7 g/l)

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

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

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****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 Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

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LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

**Relevant H and EUH statements (number and full text)**

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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