according to Regulation (EC) No 1907/2006

# 5 Min. Epoxy (resin)

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

5 Min. Epoxy (resin)

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/mixture

Epoxy resin products, solvent-free, sensitising

#### 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: +49-7157-530460 Telefax: +49-7157-530470

e-mail: info@r-g.de
Internet: www.r-g.de
Responsible Department: Management

**1.4. Emergency telephone** Vergiftungs-Informations-Zentrale Freiburg

number: Tel: +49 (0)761 19240

## **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

Indications of danger: Xi - Irritant, N - Dangerous for the environment

R phrases:

Irritating to eyes and skin.

May cause sensitisation by skin contact.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### **GHS** classification

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2 Respiratory/skin sensitization: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements: Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

### Hazardous components which must be listed on the label

epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-

(epichlorhydrin)

Bisphenol-F-Epoxy resin

Signal word: Warning
Pictograms: GHS07-GHS09

according to Regulation (EC) No 1907/2006

## 5 Min. Epoxy (resin)

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#### **Hazard statements**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

### **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

P302+P352 IF ON SKIN: Wash with plenty of water.

P321 Specific treatment (see Hazard statements on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362 Take off contaminated clothing.

P363 Wash contaminated clothing before reuse.

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.

P391 Collect spillage.

P501 Dispose of waste according to applicable legislation.

### Special labelling of certain mixtures

EUH205 Contains epoxy constituents. May produce an allergic reaction.

### 2.3. Other hazards

No information available.

### **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures

## **Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
500-033-5	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)	70 - < 75 %
25068-38-6	Xi - Irritant, N - Dangerous for the environment R36/38-43-51-53	
603-074-00-8	Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H319 H315 H317 H411	
611-275-7	Bisphenol-F-Epoxy resin	30 - < 35 %
55492-52-9	Xi - Irritant, N - Dangerous for the environment R36/38-43-51-53	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411	

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

## **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

according to Regulation (EC) No 1907/2006

# 5 Min. Epoxy (resin)

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#### After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.

#### After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

#### 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

Rinse mouth immediately and drink plenty of water.

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

No information available.

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

Treat symptomatically.

### **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

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

Non-flammable. In case of fire: Formation of: 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. Do not allow entering drains or surface water.

## **SECTION 6: Accidental release measures**

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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

### 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

No special measures are necessary.

# Advice on protection against fire and explosion

No special fire protection measures are necessary.

according to Regulation (EC) No 1907/2006

# 5 Min. Epoxy (resin)

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

# Requirements for storage rooms and vessels

Keep container tightly closed.

### Advice on storage compatibility

No special measures are necessary.

### 7.3. Specific end use(s)

Epoxy resin products, solvent-free, sensitising

### **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 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), PVC (Polyvinyl chloride)

Thickness of the glove material: > 0,5 mm

### Skin protection

Wear suitable protective clothing.

### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Combination filtering device (EN 14387): A-P2

### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: light yellow
Odour: characteristic

Test method

pH-Value: not determined

Changes in the physical state

Melting point: not determined Initial boiling point and boiling range:  $> 200 \, ^{\circ}\text{C}$  Flash point:  $> 200 \, ^{\circ}\text{C}$ 

according to Regulation (EC) No 1907/2006

5 Min. Epoxy (resin)

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**Flammability** 

Solid: not applicable
Gas: not applicable
Lower explosion limits: not determined
Upper explosion limits: not determined

**Auto-ignition temperature** 

Solid: not applicable
Gas: not applicable
Decomposition temperature: not determined

**Oxidizing properties** 

Not oxidizing.

Vapour pressure: not determined

Density: 1,18 g/cm³ ISO 2811

Water solubility: insoluble

Solubility in other solvents

not determined

Partition coefficient: not determined

Viscosity / dynamic: 12000 mPa·s ISO 3219

(at 23 °C)

Vapour density: not determined Evaporation rate: not determined

9.2. Other information

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

Danger of polymerisation.

### 10.3. Possibility of hazardous reactions

Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.

## 10.4. Conditions to avoid

none

### 10.5. Incompatible materials

Keep away from: Radical former, Peroxide, Reducing agent.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

### **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

according to Regulation (EC) No 1907/2006

# 5 Min. Epoxy (resin)

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### **Acute toxicity**

CAS No	Chemical name					
	Exposure routes	Method	Dose	Species	Source	
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)					
	oral LD50 11400 mg/kg Rat GESTIS					
	dermal	LD50 mg/kg	> 22800	Rabbit	GESTIS	
55492-52-9	Bisphenol-F-Epoxy resin					
	oral	LD50	> 5000 mg/kg	Rat		

### Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

# **SECTION 12: Ecological information**

# 12.1. Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h]   [d]	Species	Source
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)					
	Acute fish toxicity	LC50	4,4 mg/l		Oncorhynchus mykiss (Rainbow trout)	EPA-660/3-75-009
	Acute algae toxicity	ErC50	9,4 mg/l		Scenedesmus capricornutum	EPA-660/3-75-009
	Acute crustacea toxicity	EC50	2,8 mg/l	48 h	Daphnia magna	OECD 202
	Acute bacteria toxicity	(> 100 mg	/I)	3 h	Activated sludge	

### 12.2. Persistence and degradability

The product has not been tested

	The product has not been tested.						
CAS No	Chemical name						
	Method Value d Source						
	Evaluation	Evaluation					
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)						
	OECD 301F 5% 28 Manufacturer						
	Not readily biodegradable (according to OECD criteria)						
	OECD 301B         6-12%         28         Manufacturer						
	Not readily biodegradable (according to OECD criteria)						

### 12.3. Bioaccumulative potential

The product has not been tested.

## Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)	3,24

# BCF

CAS No	Chemical name	BCF	Species	Source
	epoxy resin (number average	31		Quantitative
	molecular weight <= 700), reaction			structure-acivity
	product: bisphenol-A-(epichlorhydrin)			relationship (QSAR)

according to Regulation (EC) No 1907/2006

# 5 Min. Epoxy (resin)

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### 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**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

### Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. 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

#### Waste disposal number of contaminated packaging

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

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

# **SECTION 14: Transport information**

# Land transport (ADR/RID)

**14.1. UN number:** UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(epoxy resin (number average molecular weight <= 700), reaction

product: bisphenol-A-(epichlorhydrin))

14.3. Transport hazard class(es): 9

14.4. Packing group:

Hazard label: 9



Classification code: M6

Special Provisions: 274 335 601

Limited quantity: 5 L
Transport category: 3
Hazard No: 90
Tunnel restriction code: E

### Other applicable information (land transport)

Έ

according to Regulation (EC) No 1907/2006

5	Min.	<b>Epoxy</b>	(resin)
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Inland waterways transport (ADN)

**14.1. UN number:** UN 3082

**14.2. UN** proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(epoxy resin (number average molecular weight <= 700), reaction

product: bisphenol-A-(epichlorhydrin))

14.3. Transport hazard class(es): 9
14.4. Packing group:

Hazard label: 9

**1** 

Classification code: M6

Special Provisions: 274 335 601

Limited quantity: 5 L

Other applicable information (inland waterways transport)

E1

Marine transport (IMDG)

**14.1. UN number:** UN 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(epoxy resin (number average molecular weight <= 700), reaction

product: bisphenol-A-(epichlorhydrin))

14.3. Transport hazard class(es):914.4. Packing group:III

Hazard label:



Special Provisions: 274, 335 Limited quantity: 5 L EmS: F-A, S-F

Other applicable information (marine transport)

E1

Air transport (ICAO)

**14.1. UN number:** UN 3082

**14.2. UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(epoxy resin (number average molecular weight <= 700), reaction

product: bisphenol-A-(epichlorhydrin))

14.3. Transport hazard class(es):914.4. Packing group:IIIHazard label:9

Special Provisions: A97 A158 Limited quantity Passenger: 30 kg G

IATA-packing instructions - Passenger: 964
IATA-max. quantity - Passenger: 450 L

according to Regulation (EC) No 1907/2006

# 5 Min. Epoxy (resin)

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IATA-packing instructions - Cargo: 964
IATA-max. quantity - Cargo: 450 L

Other applicable information (air transport)

E1

Passenger-LQ: Y964

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

\*2

Danger releasing substance: epoxy resin (number average molecular weight <= 700), reaction product:

bisphenol-A-(epichlorhydrin)

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 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

### Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

Regulation (EC) No. 2037/2000 concerning materials, which cause damage to the ozone layer.

Regulation (EC) No. 648/2004 (Detergents regulation)

National regulatory information

Employment restrictions: Observe employment restrictions for young people.

Water contaminating class (D): 2 - water contaminating

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

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 LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

#### Relevant R-phrases (Number and full text)

36/38 Irritating to eyes and skin.

43 May cause sensitisation by skin contact.

51 Toxic to aquatic organisms.

53 May cause long-term adverse effects in the aquatic environment.

according to Regulation (EC) No 1907/2006

## 5 Min. Epoxy (resin)

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### Relevant H- and EUH-phrases (Number and full text)

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

EUH205 Contains epoxy constituents. May produce an allergic reaction.

### **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.

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

according to Regulation (EC) No 1907/2006

# 5 min.-epoxy (hardener)

Print date: 08.08.2014 Product code: 155110-GHS-2013 Page 1 of 7

# 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: +49-7157-530460 Telefax: +49-7157-530470

e-mail: info@r-g.de
Internet: www.r-g.de
Responsible Department: Management

**1.4. Emergency telephone** Vergiftungs-Informations-Zentrale Freiburg

number: Tel: +49 (0)761 19240

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

This mixture is not classified as hazardous according to Directive 1999/45/EC.

#### **GHS** classification

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2 Respiratory/skin sensitization: Skin Sens. 1

Hazard Statements: Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation.

#### 2.2. Label elements

# Hazardous components which must be listed on the label

2,4,6-tris(dimethylaminomethyl)phenol

Signal word: Warning Pictograms: GHS07



### **Hazard statements**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

according to Regulation (EC) No 1907/2006

5 minepoxy (hardener)	

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### **Precautionary statements**

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P321 Specific treatment (see Hazard statements on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362 Take off contaminated clothing.

P363 Wash contaminated clothing before reuse.

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.
P501 Dispose of waste according to applicable legislation.

### 2.3. Other hazards

No information available.

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

### **Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
202-013-9	2,4,6-tris(dimethylaminomethyl)phenol	10 - 25%
90-72-2	Xn - Harmful, Xi - Irritant R22-36/38	
603-069-00-0	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 3; H302 H315 H319 H317 H412	
01-2119560597-27		

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

### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

### After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

#### After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

### 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

Rinse mouth immediately and drink plenty of water.

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

Treat symptomatically.

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

No information available.

according to Regulation (EC) No 1907/2006

# 5 min.-epoxy (hardener)

Print date: 08.08.2014 Product code: 155110-GHS-2013 Page 3 of 7

### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

### Unsuitable extinguishing media

Full water jet

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

The product itself does not burn. 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. Do not allow entering drains or surface water.

#### **SECTION 6: Accidental release measures**

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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

#### 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

No special measures are necessary.

# 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 container tightly closed.

# Advice on storage compatibility

No special measures are necessary.

# 7.3. Specific end use(s)

Hardener (Crosslinker)

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

### 8.1. Control parameters

#### 8.2. Exposure controls

according to Regulation (EC) No 1907/2006

## 5 min.-epoxy (hardener)

Print date: 08.08.2014 Product code: 155110-GHS-2013 Page 4 of 7





#### 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 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: like: Amines

Test method

pH-Value: not determined

Changes in the physical state

Melting point: not determined Initial boiling point and boiling range:  $> 100 \, ^{\circ}\text{C}$  Flash point:  $> 200 \, ^{\circ}\text{C}$ 

**Flammability** 

Solid: not applicable
Gas: not applicable
Lower explosion limits: not determined
Upper explosion limits: not determined

Ignition temperature: > 100 °C ISO 2719

**Auto-ignition temperature** 

Solid: not applicable
Gas: not applicable
Decomposition temperature: not determined

**Oxidizing properties** 

Not oxidizing.

according to Regulation (EC) No 1907/2006

## 5 min.-epoxy (hardener)

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Vapour pressure: not determined

Density (at 20 °C): 1,13 g/cm³ ISO 2811-2

Water solubility: easily soluble

Solubility in other solvents

not determined

Partition coefficient: not determined

Viscosity / dynamic: 10000 - 16000 mPa·s ISO 3219

(at 25 °C)

Vapour density: not determined Evaporation rate: not determined

9.2. Other information

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

#### **Acute toxicity**

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

### Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

### **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

according to Regulation (EC) No 1907/2006

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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.

### **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 MARPOL73/78 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

1999/13/EC (VOC): 19 % (214,7 g/l)

**National regulatory information** 

Employment restrictions: Observe employment restrictions for young people.

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.

according to Regulation (EC) No 1907/2006

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### **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 LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

#### Relevant R-phrases (Number and full text)

Harmful if swallowed.
36/38 Irritating to eyes and skin.

### Relevant H- and EUH-phrases (Number and full text)

H302 Harmful if swallowed. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

### **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.

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