according to Regulation (EC) No 1907/2006

5 Min. Epoxy (resin)

Print date: 16.11.2015	Product code: 155105	F	Page 1 of 9					
SECTION 1: Identification of the substance/mixture and of the company/undertaking								
1.1. Product identifier	1.1. Product identifier							
5 Min. Epoxy (resin)								
1.2. Relevant identified uses of the	e substance or mixture and uses advised agains	<u>st</u>						
Use of the substance/mixture								
Epoxy resin products, solve	nt-free, sensitising							
1.3. Details of the supplier of the	safety data sheet							
Company name:	R&G Faserverbundwerkstoffe GmbH							
Street:	Composite Technology 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	Vergiftungs-Informations-Zentrale Freiburg							
<u>number:</u>	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 Respiratory or skin sensitisation: 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

Regulation (EC) No. 1272/2008

Hazard components for labelling

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

Signal word: Pictograms:

Warning



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.

according to Regulation (EC) No 1907/2006

5 Min. Epoxy (resin)				
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Precautionary statemer	nts			
P501	Dispose of waste according to applicable legislation			
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.			
P273	Avoid release to the environment.			
P280	Wear protective gloves/protective clothing/eye protection/face protection.			
P321	Specific treatment (see Hazard statements on this label).			
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.			

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

CAS No	Chemical name			
	EC No	Index No	REACH No	
	Classification according to Regulati	on (EC) No. 1272/2008 [CLP]		
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A- (epichlorhydrin)			
	500-033-5	603-074-00-8		
	Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H319 H315 H317 H411			
55492-52-9	Bisphenol-F-Epoxy resin			25-50%
	611-275-7			
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411			

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

Washing places concerned with a lot of water and soap. If the symptom doesn't stop, consult doctor.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

according to Regulation (EC) No 1907/2006

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5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2), Extinguishing powder, Water spray jet Fight major fires with a water spray jet or alcohol-resistant foam.

Unsuitable extinguishing media

High power water jet.

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

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

Provide adequate room ventilation, if necessary with 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 only in the original container. Provide for retaining containers, eg. floor pan without outflow.

Advice on storage compatibility

Store separately from foodstuffs.

Further information on storage conditions

Keep receptacles tightly sealed.

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

according to Regulation (EC) No 1907/2006

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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: Colour: Odour:	liquid light yellow characteristic	
		Test method
pH-Value:	not determined	
Changes in the physical state Melting point: Initial boiling point and boiling range:	not determined > 200 °C	
Flash point:	> 200 °C	
Flammability Solid: Gas: Lower explosion limits: Upper explosion limits:	not applicable not applicable not determined not determined	
Auto-ignition temperature Solid: Gas:	not applicable not applicable	
Decomposition temperature:	not determined	
Oxidizing properties Not oxidizing.		
Vapour pressure:	not determined	

according to Regulation (EC) No 1907/2006

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Density:	1,18 g/cm³	ISO 2811		
Water solubility:	insoluble			
Solubility in other solvents not determined				
Partition coefficient:	not determined			
Viscosity / dynamic: (at 23 °C)	12000 mPa·s	ISO 3219		
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 further relevant information

10.2. Chemical stability

no decomposition when stored and handled properly

10.3. Possibility of hazardous reactions

reaction with strong oxidising agents Alkali (lye) ,Acids

10.4. Conditions to avoid

none

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name					
	Exposure routes	Method	Dose	Species	Source	
25068-38-6	epoxy resin (number average molec	ular weight <	= 700), reaction	product: bisphenol-A-(epichlorhy	drin)	
	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.

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CAS No	Chemical name						
	Aquatic toxicity Method Dose [h] [d] Species Source						
25068-38-6	epoxy resin (number average m	olecular we	eight <= 700), reac	tion prod	uct: bisphenol-A-(epichlorhydrir	ו)	
	Acute fish toxicity	LC50	4,4 mg/l	96 h	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 m	ıg/l)	3 h	Activated sludge		

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
25068-38-6	epoxy resin (number average molecular weight <= 700), reaction product: bisphenol-A-(epichlorhydrin)			lrin)
	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		

BCF					
CAS No	Chemical name	BCF	Species	Source	
25068-38-6	epoxy resin (number average molecular	31		Quantitative	
	weight <= 700), reaction product:			structure-acivity	
	bisphenol-A-(epichlorhydrin)			relationship (QSAR)	

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

according to Regulation (EC) No 1907/2006

		5 Min. Epoxy (resin)				
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080299	COATINGS (PAINTS, V	IANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF ARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND s from MFSU of other coatings (including ceramic materials); wastes not				
Waste disposa 080299	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 Non-contar substance	minated packages may be	e recycled. Handle contaminated packages in the same way as the				
SECTION 14: Tr	ansport information					
Land transport (A	ADR/RID)					
<u>14.1. UN numb</u>	-	UN 3082				
	er shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxide derivatives mw <=700)				
14.3. Transpor	rt hazard class(es):	9				
14.4. Packing	group:	III				
Hazard label:		9				
Classification of		M6				
Special Provisi Limited quantit		274 335 601 5 L				
Transport cate	-	3				
Hazard No:		90				
Tunnel restricti	ion code:	E				
Other applical E1	ble information (land tran	nsport)				
Inland waterways	s transport (ADN)					
<u>14.1. UN numb</u>	<u>per:</u>	UN 3082				
<u>14.2. UN prop</u>	er shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxide derivatives mw <=700)				
14.3. Transpor	rt hazard class(es):	9				
14.4. Packing	group:	III				
Hazard label:		9				
Classification of	odo:	Me				
Special Provisi		M6 274 335 601				
Limited quantit		5 L				
-	ble information (inland w					
Marine transport	(IMDG)					

Marine transport (IMDG)

according to Regulation (EC) No 1907/2006

5 Min. Epoxy (resin)		
Print date: 16.11.2015	Product code: 155105	Page 8 of 9
<u>14.1. UN number:</u>	UN 3082	
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxide derivatives mw <=700)	
14.3. Transport hazard class(es):	9	
14.4. Packing group:	III	
Hazard label:	9	
Marine pollutant:	Ja	
Special Provisions:	274, 335	
Limited quantity:	5L	
EmS:	F-A, S-F	
Other applicable information (marine tr E1	ansport)	
Air transport (ICAO)		
<u>14.1. UN number:</u>	UN 3082	
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxide derivatives mw <=700)	
14.3. Transport hazard class(es):	9	
14.4. Packing group:	III	
Hazard label:	9	
	₩	
	9	
Special Provisions:	A97 A158	
Limited quantity Passenger:	30 kg G	
IATA-packing instructions - Passenger:	964	
IATA-max. quantity - Passenger: IATA-packing instructions - Cargo:	450 L 964	
IATA-packing instructions - Cargo. IATA-max. quantity - Cargo:	964 450 L	
Other applicable information (air transp		
E1		
Passenger-LQ: Y964		
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	yes	
Danger releasing substance:	epoxy resin (number average molecular weight <= 700), reaction produbisphenol-A-(epichlorhydrin)	uct:
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		

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

according to Regulation (EC) No 1907/2006

5 Min. Epoxy (resin)			
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EU regulatory information			
Additional information To follow: 850/2004/EC , 79/117/E Regulation (EC) No. 2037/2000 co Regulation (EC) No. 648/2004 (De	ncerning materials, which cause damage to the ozone layer.		
National regulatory information			
Employment restrictions:	Observe restrictions to employment for juvenils according to the 'juveni work protection guideline' (94/33/EC).	ile	
Water contaminating class (D): Skin resorption/Sensitization:	2 - water contaminating 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 H and EUH statements (number and full text) H315 Causes skin irritation. H317 May cause an allergic skin reaction. H310 Causes serious eve 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.)