

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Epoxy Resin C

Revision date: 05.04.2021

Product code: 120305

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

1.1. Product identifier

Epoxy Resin C

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

Use of the substance/mixture

Epoxy resin binder

Uses advised against

No further relevant information available.

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	
Contact person:	Michael Groß	Telephone: +49 (0)7157 5304-60
e-mail:	urlaubmg@r-g.de	
Internet:	www.r-g.de	
Responsible Department:	Management	

1.4. Emergency telephone number: Vergiftungs-Informations-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

Respiratory or skin sensitisation: Skin Sens. 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

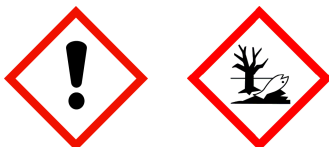
Hazard components for labelling

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

Bisphenol-F-Epoxy resin

Signal word: Warning

Pictograms:



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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

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye/face protection.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.

Special labelling of certain mixtures

EUH205	Contains epoxy constituents. May produce an allergic reaction.
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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
	GHS Classification	
1675-54-3	2,2'-[[1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane	60-100 %
		01-2119456619-26
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411	
9003-36-5	Bisphenol F epichlorohydrin resins MG <= 700	25-50 %
	500-006-8	01-2119454392-40
	Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H317 H411	

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
1675-54-3		2,2'-[[1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane	60-100 % %
		dermal: LD50 = 23000 mg/kg; oral: LD50 = 15000 mg/kg	
9003-36-5	500-006-8	Bisphenol F epichlorohydrin resins MG <= 700	25-50 % %
		oral: LD50 = >2000 mg/kg	

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. Consult a doctor if skin irritation persists.

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

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ophthalmologist immediately.

After ingestion

Seek medical advice immediately.

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

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), Extinguishing powder, Water spray jet
Fight a major fire with water spray 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

Avoid pressure increase due to heat in container. Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Fire residue and contaminated firefighting water must be disposed of in accordance with government regulations. 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

General measures

Wear protective equipment. Keep unprotected persons away. Provide adequate ventilation. Do not breathe in vapours.

6.2. Environmental precautions

Do not discharge into drains, surface or groundwater. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid binders, universal binders, sawdust).
Ensure sufficient ventilation. 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, e.g. floor pan without outflow.

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Hints on joint storage

Store separately from foodstuffs.

Further information on storage conditions

Keep in well sealed receptacles at a cool, dry location. Store container in a well-ventilated place.

7.3. Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
1675-54-3	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane			
Worker DNEL,		dermal		0,75 mg/kg bw/day
Worker DNEL,		inhalation		4,93 mg/m ³
9003-36-5	Bisphenol F epichlorohydrin resins MG <= 700			
Worker DNEL,		dermal		104,15 mg/kg bw/day
Worker DNEL,		inhalation		29,39 mg/m ³

PNEC values

CAS No	Substance	Environmental compartment	Value
1675-54-3	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane		
		Freshwater	0,006 mg/l
		Marine water	0,001 mg/l
		Freshwater sediment	0,341 mg/kg
		Marine sediment	0,034 mg/kg
		Secondary poisoning	11 mg/kg
		Micro-organisms in sewage treatment plants (STP)	10 mg/l
		Soil	0,065 mg/kg
9003-36-5	Bisphenol F epichlorohydrin resins MG <= 700		
		Freshwater	0,003 mg/l
		Freshwater sediment	0,294 mg/kg
		Marine sediment	0,029 mg/kg
		Micro-organisms in sewage treatment plants (STP)	10 mg/l
		Soil	0,237 mg/kg

Additional advice on limit values

The product does not contain any relevant quantities of substances with limit values that require monitoring at the workplace.

8.2. Exposure controls

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**Protective and hygiene measures**

Keep away from food, drink and animal feeding stuffs. 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

Protective goggles

Hand protection

Only use chemical protective gloves with a CE marking of category III. use. The glove material must be impermeable and resistant to the product / substance / preparation. substance / preparation. Selection of the glove material considering the breakthrough times, permeation rates and degradation. Before each new use of the glove, the tightness must be checked. Preventive skin protection by using skin protectant is recommended. Glove material: Butyl rubber, Nitrile rubber. Recommended material thickness: = 0.4 mm. The selection of a suitable glove depends not only on the material, but also on further other quality characteristics and varies from manufacturer to manufacturer. Since the product is a preparation of several substances, the resistance of materials cannot be calculated in advance and must therefore be checked before use. be checked before use.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
Combination filtering device: 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
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Changes in the physical state

Melting point:	not determined
Boiling point or initial boiling point and boiling range:	> 200 °C
Flash point:	214 °C

Flammability

Solid/liquid:	not applicable
Gas:	not applicable

Explosive properties

The product is not explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	400 °C

Self-ignition temperature

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

Oxidizing properties

Not oxidising.

Vapour pressure: not determined

Density (at 23 °C): 1,17 g/cm³

Water solubility: The study does not need to be conducted
 because the substance is known to be
 insoluble in water.

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined

Viscosity / dynamic:
 (at 25 °C) 10000 mPa·s ISO 3219

Relative vapour density: not determined

Evaporation rate: not determined

9.2. Other information

Solid content: not determined

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

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

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

No further relevant information available.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

No hazardous decomposition products known, if stored properly.

Further information

In case of fire: Toxic gases and vapors

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

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Acute toxicity

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
1675-54-3	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane					
	oral	LD50 mg/kg	15000	rat		
	dermal	LD50 mg/kg	23000	rabbit		
9003-36-5	Bisphenol F epichlorohydrin resins MG <= 700					
	oral	LD50 mg/kg	>2000	Ratte		

Irritation and corrosivity

On the skin: Causes skin irritation. Serious eye damage/irritation: Causes severe eye irritation.

Additional information on tests

The 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	Dose	[h] [d]	Species	Source	Method
1675-54-3	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane					
	Acute fish toxicity	LC50	2 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50	11 mg/l	72 h	algae	
	Acute crustacea toxicity	EC50	1,8 mg/l	48 h	Daphnia magna	

12.2. Persistence and degradability

No further relevant information available.

12.3. Bioaccumulative potential

No further relevant information available.

12.4. Mobility in soil

No further relevant information available.

12.5. Results of PBT and vPvB assessment

not applicable

12.6. Endocrine disrupting properties

No further relevant information available.

12.7. Other adverse effects

No further relevant information available.

Further information

Do not allow to enter ground water, water courses or sewage system. Danger to drinking water even if small quantities leak into the ground. In waters also toxic to fish and plankton. Toxic to aquatic organisms. Water hazard class 2 (Self-assessment): hazardous to water.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

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Disposal recommendations

For disposal, observe the local official regulations. Can be disposed of together with household waste after curing.

List of Wastes Code - 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

List of Wastes Code - 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. (Epoxide resin)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9



Classification code: M6
 Limited quantity: 5 L
 Excepted quantity: E1
 Transport category: 3
 Hazard No: 90
 Tunnel restriction code: E

Marine transport (IMDG)

14.1. UN number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxide resin) MARINE POLLUTANT
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9



Marine pollutant: Ja
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-A, S-F

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Other applicable information (marine transport)

E1

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxide resin)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9



Limited quantity Passenger:	30 kg G
Excepted quantity:	E1

Other applicable information (air transport)

Passenger-LQ: Y964

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: epoxy resin (number average molecular weight \leq 700), reaction product: bisphenol-A-(epichlorhydrin)

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

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

Restrictions on use (REACH, annex XVII):

Entry 3

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 restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

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**Changes**

This data sheet contains changes from the previous version in section(s): 1,3,4,5,6,7,8,9,10,11,12,13,14,15.

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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.
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.)