Safety Data Sheet

in accordance with Regulation (EC) No 2020/878

Mould resin P-N

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

1.1. Product identifier

Mould resin N

UFI: NG10-S0GV-6004-2408

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

Use of the substance/mixture

Epoxy resin

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
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

GB CLP Regulation

Skin Irrit. 2; H315
Eye Irrit. 2; H319
Skin Sens. 1; H317
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

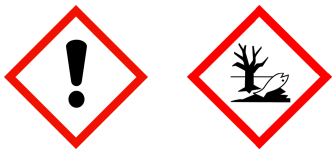
GB CLP Regulation

Hazard components for labelling

bis-[4-(2,3-epoxipropoxi)phenyl]propane
Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane

Signal word: Warning

Pictograms:



Hazard statements

H319 Causes serious eye irritation.
H315 Causes skin irritation.

H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P261	Avoid breathing Dampf oder Aerosol.
P314	Get medical advice/attention if you feel unwell.
P280	Wear protective gloves and eye protection/face protection.
P273	Avoid release to the environment.

2.3. Other hazards

The mixture does not contain a vPvB substance (vPvB = very persistent, very bioaccumulative) or does not fall under Annex XIII of Regulation (EC) 1907/2006. Regulation (EC) 1907/2006 (< 0.1 %).
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or does not fall under Annex XIII of Regulation (EC) 1907/2006 (< 0.1 %).
The mixture does not contain any substance with endocrine-disrupting properties (< 0.1 %).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane			25-<50 %
	216-823-5	603-073-00-2	01-2119456619-26	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H319 H317 H411			
	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane			10-<25 %
	701-263-0		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	216-823-5	bis-[4-(2,3-epoxipropoxi)phenyl]propane	25-<50 %
	dermal: LD50 = 23000 mg/kg; oral: LD50 = 15000 mg/kg Skin Irrit. 2; H315: >= 5 - 100 Eye Irrit. 2; H319: >= 5 - 100		
	701-263-0	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane	10-<25 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

never give an unconscious person things thru the mouth

After inhalation

Provide fresh air. Consult physician. If victim is at risk of losing consciousness, position and transport on their side.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Consult physician if problems persist.

Remove contaminated, saturated clothing immediately.

After contact with eyes

After contact with eye rinse immediately with lot of water at least 5 minutes with open eyelid. Subsequently consult an opthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Consult physician.

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

SECTION 11: Toxicological information
SECTION 4: First aid measures
After inhaling vapours, first symptoms of poisoning may develop hours later, so always consult a doctor.

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

Provide symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

In case of fire may be liberated: , toxic gases, Chlorhydric gas (HCl).

5.3. Advice for firefighters

Wear a protective full body suit. Wear breathing apparatus without recirculating air and suitable protective clothing.

Additional information

No sensitizing effect known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Ensure adequate ventilation of the storage area. Avoid contact with skin. Avoid contact with eyes.

For non-emergency personnel

Ensure adequate ventilation in the workplace.
Remove all sources of ignition.
Avoid contact with eyes and skin.

6.2. Environmental precautions

Contain escaping liquid with suitable material (e.g. soil).
Do not let the product enter the groundwater, open water, or the sewerage system.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Formation of toxic gases is possible during heating or in case of fire.

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. Product is not explosive. However, formation of explosive air/vapour mixtures are possible. When using do not eat, drink,

smoke or sneeze.

Advice on general occupational hygiene

The usual precautions when handling chemicals must be observed.
after work and before breaks for thorough skin cleansing. Keep away from food, drink and animal feeding stuffs.
Contaminated work clothing should not be allowed out of the workplace.

Further information on handling

Wash hands before breaks and after work. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Employ reliable measures to prevent the product from entering the soil.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep in well sealed receptacles at a cool, dry location.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane			
Consumer DNEL, acute		dermal	systemic	3,6 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	0,75 mg/m³
Consumer DNEL, acute		oral	systemic	0,75 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	3,6 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,75 mg/m³
Consumer DNEL, long-term		oral	systemic	0,75 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	8,3 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	12,3 mg/m³
Worker DNEL, long-term		dermal	systemic	8,3 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	12,3 mg/m³
	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane			
Worker DNEL, long-term		dermal	systemic	104,15 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	29,39 mg/m³

PNEC values

CAS No	Substance	
Environmental compartment		Value
1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane	
Freshwater		0,006 mg/l
Marine water		0,0003 mg/l
Freshwater sediment		0,5 mg/kg
Marine sediment		0,5 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,05 mg/kg
	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane	
Freshwater		0,003 mg/l
Freshwater (intermittent releases)		0,025 mg/l
Marine water		0 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

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation/vapour extraction at the workplace.

Individual protection measures, such as personal protective equipment

Eye/face protection

Protective goggles (EN 166)

Hand protection

Only chemicals - protective gloves with CE-labeling of category 3 use. (EN374)

Skin protection

Wear protective clothing.

Respiratory protection

Not necessary when the room is well ventilated.

Environmental exposure controls

No further relevant information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid Paste	
Colour:	black	
Odour:	weak characteristic	
Flash point:		> 150 °C
Water solubility:		insoluble in water
Vapour pressure: (at 20 °C)		<0,1 hPa
Density (at 25 °C):		1,26-1,34 g/cm³

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

not explosive.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product has not been tested.

10.2. Chemical stability

Stabile under the specified storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions at a correct storage and handling.

10.4. Conditions to avoid

none known

10.5. Incompatible materials

amines.

10.6. Hazardous decomposition products

no decomposition when stored and handled properly

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

ATEmix calculated

ATE (oral) 2000 mg/kg; ATE (dermal) 1270 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane				
	oral	LD50 15000 mg/kg	Rat	Manufacturer	
	dermal	LD50 23000 mg/kg	Rabbit	Manufacturer	
	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane				
	oral	LD50 > 5000 mg/kg	Rat	Manufacturer	
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	

Irritation and corrosivity

Irritation to skin, eyes, and mucous membranes.

Sensitising effects

May cause sensitization by inhalation and skin contact.

11.2. Information on other hazards

Endocrine disrupting properties

The mixture does not contain any substance with endocrine-disrupting properties (< 0.1 %).

Other information

No data available.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
1675-54-3	bis-[4-(2,3-epoxipropoxi)phenyl]propane						
	Acute fish toxicity	LC50	2 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	Manufacturer	
	Acute crustacea toxicity	EC50	1,8 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	
	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and [2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane and [2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane						
	Acute fish toxicity	LC50 mg/l	2,54	96 h	Leuciscus idus (golden orfe)	Manufacturer	
	Acute algae toxicity	ErC50	1,8 mg/l	72 h	Selenastrum capricornutum	Manufacturer	
	Acute crustacea toxicity	EC50 mg/l	2,55	48 h	Daphnia magna (Big water flea)	Manufacturer	

12.2. Persistence and degradability

Biological degradation: Product is biodegradable with difficulty.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Further information

Do not let the product enter the groundwater, open water, or the sewerage system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation

List of Wastes Code - residues/unused products

200127 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); paint, inks, adhesives and resins containing hazardous substances; hazardous waste

Contaminated packaging

Noncleanable packaging must be disposed of like the substance.
Empty the container completely.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis-[4-(2,3-epoxipropoxi)phenyl]propane)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9

Classification code: M6
Limited quantity: 5 L
Transport category: 3
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
Hazard label: 9

Classification code: M6
Limited quantity: 5 L

Marine transport (IMDG)

14.1. UN number or ID number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
Hazard label: 9

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

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bis-[4-(2,3-epoxipropoxi)phenyl]propane)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
Hazard label: 9

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

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, Entry 75

Directive 2010/75/EU on industrial emissions:	0 %

National regulatory information

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

SECTION 16: Other information

Abbreviations and acronyms

Skin Irrit: Skin irritation
Eye Irrit: Eye irritation
Skin Sens: Skin sensitisation
Aquatic Chronic: Chronic aquatic hazard

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.

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