

SAFETY DATA SHEET

RESION Epoxy Starter Base

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

1.1. Product identifier

Trade name

RESION Epoxy Starter Base

Product no. EP106

Unique formula identifier (UFI) W8C0-20SM-X00H-CW33

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

Relevant identified uses of the substance or mixture Epoxy binder

▼ Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company and address Polyestershoppen BV Oostbaan 680

2841 ML Moordrecht Netherlands +31 85 0220090

Contact person

E-mail

info@polyestershoppen.nl

Revision

13/12/2023

SDS Version 2.0

Date of previous version

05/05/2022 (1.0)

1.4. Emergency telephone number Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Skin Irrit. 2; H315, Causes skin irritation. Skin Sens. 1; H317, May cause an allergic skin reaction. Eye Irrit. 2; H319, Causes serious eye irritation. Aquatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)





Signal word Warning

Hazard statement(s)

Causes skin irritation. (H315) May cause an allergic skin reaction. (H317) Causes serious eye irritation. (H319) Toxic to aquatic life with long lasting effects. (H411)

Precautionary statement(s)

General

If medical advice is needed, have product container or label at hand. (P101) Keep out of reach of children. (P102)

Prevention

Avoid breathing mist/vapour. (P261) Wash hands thoroughly after handling. (P264) Wear eye protection/protective gloves/protective clothing. (P280)

Response

IF ON SKIN: Wash with plenty of water and soap. (P302+P352) If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)

Storage

▼ Disposal

Dispose of contents/container in accordance with local regulation (P501)

Hazardous substances

bis-[4-(2,3-epoxipropoxi)phenyl]propane Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Additional labelling

EUH205, Contains epoxy constituents. May produce an allergic reaction. UFI: W8C0-20SM-X00H-CW33

2.3. Other hazards

Additional warnings

Contains epoxy constituents. May produce an allergic reaction. This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. ▼ Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
bis-[4-(2,3- epoxipropoxi)phenyl]propane	CAS No.: 1675-54-3 EC No.: 216-823-5 UK-REACH: Index No.: 603-073-00-2	60-80%	Skin Irrit. 2, H315 (SCL: 5.00 %) Skin Sens. 1, H317 Eye Irrit. 2, H319 (SCL: 5.00 %) Aquatic Chronic 2, H411	
Formaldehyde, oligomeric reaction products with 1- chloro-2,3-epoxypropane and	CAS No.: 9003-36-5 EC No.: 500-006-8 UK-REACH:	25-40%	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411	



phenol	Index No.:			
oxirane, mono[(C12-14- alkyloxy)methyl] derivs.	CAS No.: 68609-97-2 EC No.: 271-846-8 UK-REACH: Index No.: 603-103-00-4	15-25%	Skin Irrit. 2, H315 Skin Sens. 1, H317	[19]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

▼ Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

▼ Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

▼ Burns

Not applicable.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

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

If skin irritation or rash occurs: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. ▼ Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are



exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO2)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances. Contaminated areas may be slippery.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. ▼ Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. ▼ Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Always store in containers of the same material as the original container.

Storage temperature

Adequately ventilated premises

Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. ▼ Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

▼ DNEL

his_[/]_(2.3-epoxipr	onovi)nhen	llnronang
DIS-14-(2.5-eDUXIDI	UDUXIIDHEIT	viibiobarie

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	0.0893 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	0.75 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	0.87 mg/m3



Long term – Systemic effects - Workers	Inhalation	4.93 mg/m3
Short term – Systemic effects - General population	Oral	0.5 mg/kg bw/day
Formaldehyde, oligomeric reaction products with 1-chlo	oro-2,3-epoxypropane and phenol	
Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	62.5 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	104.15 mg/kg bw/da
Long term – Systemic effects - General population	Inhalation	8.7 mg/m3
Long term – Systemic effects - Workers	Inhalation	29.39 mg/m3
Long term – Systemic effects - General population	Oral	6.25 mg/kg bw/day

▼ PNEC

bis-[4-(2,3-epoxipropoxi)phenyl]propane

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater	Single	0.006 mg/L
Freshwater sediment	Single	0.341 mg/kg
Marine water	Single	0.001 mg/L
Marine water sediment	Single	0.034 mg/kg
Sewage treatment plant	Single	10 mg/L
Soil	Single	0.065 mg/kg

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

Duration of Exposure:	PNEC:		
Single	0.003 mg/L		
	0.294 mg/kg		
Single	0.025 mg/L		
Single	0 mg/L		
Single	0.029 mg/kg		
Single	10 mg/L		
Single	0.237 mg/kg		
	Duration of Exposure: Single Single Single Single Single		

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

Take off contaminated clothing and wash it before reuse.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

▼ Generally

Use only UKCA marked protective equipment.

Respiratory Equipment



Туре	Class	Colour	Standards	
Respiratory protection is not needed in the event of adequate ventilation	-	-	-	
Skin protection				
Recommended	Type/Category	Standards		
Dedicated work clothing should be worn	-	-		Ŕ
Hand protection				
Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0.4	> 480	EN374-2, EN374-3, EN388	
Eye protection				
Туре	Standards			
Safety glasses with side shields.	2 EN166			
CTION 9: Physical and ch	emical properties			
. Information on basic pl	hysical and chemical pro	operties		
Physical state Liquid				
Colour Pale yellow				
Odour / Odour threshold Characteristic	ł			
▼ pH Testing not relevant of	or not possible due to th	e nature of the product.		
Density (g/cm³) 1.13787 (20 °C)				
-	or not possible due to th	e nature of the product.		
Particle characteristics				

Particle characteristics Does not apply to liquids.

Phase changes

SI

9.

Melting point/Freezing point (°C) Testing not relevant or not possible due to the nature of the product.

Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

Boiling point (°C) 201

Vapour pressure <2 hPa (20 °C)

▼ Relative vapour density



Testing not relevant or not possible due to the nature of the product.

▼ Decomposition temperature (°C)

Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

Flash point (°C)

140

▼ Flammability (°C)

Testing not relevant or not possible due to the nature of the product.

- ▼ Auto-ignition temperature (°C) 230
- ▼ Lower and upper explosion limit (% v/v)

Testing not relevant or not possible due to the nature of the product.

Solubility

- Solubility in water Insoluble
- n-octanol/water coefficient (LogKow) Testing not relevant or not possible due to the nature of the product.
- Solubility in fat (g/L) Testing not relevant or not possible due to the nature of the product.

9.2. Other information

- Other physical and chemical parameters No data available.
- Oxidizing properties

Testing not relevant or not possible due to the nature of the product.

SECTION 10: Stability and reactivity

- 10.1. ▼ Reactivity
- No data available.
- 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

- 10.3. ▼ Possibility of hazardous reactions
- None known.
- 10.4. ▼ Conditions to avoid None known.
- 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity	
Product/substance	bis-[4-(2,3-epoxipropoxi)phenyl]propane
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	15000 mg/kg
Product/substance	bis-[4-(2,3-epoxipropoxi)phenyl]propane
Species:	Rabbit



Derm
LD50
23000

Dermal .D50 23000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

▼ Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

bis-[4-(2,3-epoxipropoxi)phenyl]propane has been classified by IARC as a group 3 carcinogen.

SECTION 12: Ecological information

12.1. ▼Toxicity

Product/substance	bis-[4-(2,3-epoxipropoxi)phenyl]propane
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	2 mg/L
Product/substance	bis-[4-(2,3-epoxipropoxi)phenyl]propane
Species:	Daphnia
Duration:	48 hours
Test:	EC50
Result:	1.8 mg/L
Product/substance	bis-[4-(2,3-epoxipropoxi)phenyl]propane
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	11 mg/L

Toxic to aquatic life with long lasting effects.



- 12.2. ▼ Persistence and degradability No data available.
- 12.3. ▼ Bioaccumulative potential No data available.
- 12.4. ▼ Mobility in soil No data available.
- 12.5. ▼ Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. ▼ Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

13.1. ▼ Waste treatment methods

Product is covered by the regulations on hazardous waste. (*) HP 4 - Irritant (skin irritation and eye damage) HP 13 – Sensitising HP 14 – Ecotoxic Dispose of contents/container to an approved waste disposal plant. Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

▼ EWC code 07 02 99

Wastes not otherwise specified

Contaminated packing Packaging containing resi

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

14.2) UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Transport hazard class: 9 Label: 9 Classification code: M6	Ш	Yes	Limited quantities: 5 L Tunnel restriction code: 3 (-) See below for additional information.
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Transport hazard class: 9 Label: 9 Classification code: M6	Ш	Yes	Limited quantities: 5 L EmS: F-A S-F See below for additional information.
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Transport hazard class: 9 Label: 9 Classification code: M6	III	Yes	See below for additional information.
	D UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	D UN proper shipping name Hazard class(es) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Transport hazard class: 9 Label: 9 Classification code: M6 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Transport hazard class: 9 Label: 9 Classification code: M6 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Transport hazard class: 9 Label: 9 Classification code: M6 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Transport hazard class: 9 Label: 9 Classification code: M6	D UN proper shipping nameHazard class(es)PG*ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.Transport hazard class: 9 Label: 9 Classification code: M6 Classification code: M6IIIENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.Transport hazard class: 9 Label: 9 Classification code: M6 Classification code: M6 Classification code: M6 Label: 9 Classification code: M6 Classification code: M6 	D UN proper shipping nameHazard class(es)PG*Env**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.Transport hazard class: 9 Label: 9 Classification code: M6 Classification code: M6IIIYesENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.Transport hazard class: 9 Label: 9 Classification code: M6 Classification code: M6 Class



14.1 14.2	14.3	14.4	14.5	Other
UN / ID UN proper shipping name	Hazard class(es)	PG*	Env**	information:
	₹ <u>₹</u>			

* Packing group

** Environmental hazards

▼ Additional information

These substances when carried in single or combination packaging's containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR/IMDG/IATA provided the packaging's meet the general provisions of 4.1.1.1, 4.1.1.2, 4.1.1.4 - 4.1.1.8 (ADR, IMDG) / 5.0.2.4.1, 5.0.2.6.1.1, 5.0.2.8 (IATA).

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

14.6. ▼ Special precautions for user

Not applicable.

14.7. ▼ Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Restrictions for application

People under the age of 18 shall not be exposed to this product.

Demands for specific education

Use of this product requires dedicated training in work with polyurethane and epoxy products.

SEVESO - Categories / dangerous substances

E2 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 200 tonnes / (upper-tier): 500 tonnes

▼ REACH, Annex XVII

RESION Epoxy Starter Base is subject to UK-REACH restrictions, UK-REACH annex XVII (entry 3).

▼ Additional information

Not applicable.

▼ Sources

The Management of Health and Safety at Work Regulations 1999.

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3 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. Abbreviations and acronyms ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS = Chemical Abstracts Service CE = Conformité Européenne (European conformity) CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] CSA = Chemical Safety Assessment CSR = Chemical Safety Report DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EINECS = European Inventory of Existing Commercial chemical Substances ES = Exposure Scenario EUH statement = CLP-specific Hazard statement EuPCS = European Product Categorisation System EWC = European Waste Catalogue GHS = Globally Harmonized System of Classification and Labelling of Chemicals IARC = International Agency for Research on Cancer (IARC) IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) OECD = Organisation for Economic Co-operation and Development PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RRN = REACH Registration Number SCL = A specific concentration limit SVHC = Substances of Very High Concern STOT-RE = Specific Target Organ Toxicity - Repeated Exposure STOT-SE = Specific Target Organ Toxicity - Single Exposure TWA = Time weighted average UN = United Nations UVBC = Unknown or variable composition, complex reaction products or of biological materials VOC = Volatile Organic Compound vPvB = Very Persistent and Very Bioaccumulative Additional information The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law. The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law. The safety data sheet is validated by H.A.B.

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en