



1 Identification of the substance / preparation and of the company

1.1 Product identifier

Buehler EpoThin Resin
Article number 20-8140-xxx

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

1.2.1 Relevant uses

Epoxy resin

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

Buehler GmbH

In der Steele 2
D-40599 Düsseldorf / GERMANY
Phone: 0800 707 6273
Fax: 0800 707 6274
Homepage: www.buehler-met.de/en/
E-mail: sales@buehler.co.uk

Address enquiries to

Technical information

sales@buehler.co.uk

Safety Data Sheet

sdb@chemiebuero.de

1.4 Emergency phone

0800 707 6273 (Only valid if dialled within the UK) +49 (0) 211 974100

2 Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Carc. 2, H351
Skin Sens. 1, H317
Muta. 2, H341
Aquatic Chronic 2, H411
Skin Irrit. 2, H315
Eye Irrit. 2, H319

Classification according to conversion table Annex VII 1272/2008/EC

2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC

Xn-N, R 40-36/38-43-68-51/53



2.2 Label elements

Hazard symbols



Harmful



Dangerous for the environment

Contains:

1,3-Bis(2,3-epoxypropoxy)-2,2-dimethylpropane

Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight \leq 700)

Propylidynetrimethyl trimethacrylate

Butyl 2,3-epoxypropyl ether

R-phrases

R 40: Limited evidence of a carcinogenic effect.

R 36/38: Irritating to eyes and skin.

R 43: May cause sensitisation by skin contact.

R 68: Possible risk of irreversible effects.

R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S 61: Avoid release to the environment. Refer to special instructions, safety data sheets.

Special labelling

Contains epoxy-containing compounds. Observe manufacturer's instructions.

2.3 Other hazards

Physico-chemical hazards

See chapter 10.

Human health dangers

See chapter 11.

Environmental hazards

See chapter 12.

Other hazards

none

3 Composition / Information on ingredients

3.1 Substances

The product in question is a mixture.

3.2 Mixtures

Range [%]	Substance
80 - <100	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight \leq 700) CAS: 25068-38-6, EINECS/ELINCS: 500-033-5, EU-INDEX: 603-074-00-8 GHS/CLP: Eye Irrit. 2, H319 - Skin Irrit. 2, H315 - Skin Sens. 1, H317 - Aquatic Chronic 2, H411 EEC: Xi-N, R 36/38-51/53-43
10 - < 20	Butyl 2,3-epoxypropyl ether CAS: 2426-08-6, EINECS/ELINCS: 219-376-4, EU-INDEX: 603-039-00-7 GHS/CLP: Flam. Liq. 3, H226 - Carc. 2, H351 - Muta. 2, H341 - Acute Tox. 4, H332 - STOT SE 3, H302 - Skin Sens. 1, H335 - Aquatic Chronic 3, H317 - H412 EEC: Xn, R 10-20/22-37-40-43-52/53-68
1 - < 10	Propylidynetrimethyl trimethacrylate CAS: 3290-92-4, EINECS/ELINCS: 221-950-4 GHS/CLP: not determined EEC: Xi, R 36/38-43
1 - < 10	1,3-Bis(2,3-epoxypropoxy)-2,2-dimethylpropane CAS: 17557-23-2, EINECS/ELINCS: 241-536-7, EU-INDEX: 603-094-00-7 GHS/CLP: Skin Irrit. 2, H315 - Skin Sens. 1, H317 EEC: Xi, R 38-43

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%. For the wording of the listed risk phrases refer to section 16.



4 First aid measures

4.1 Description of first aid measures

General information	Change soaked clothing.
Inhalation	Ensure supply of fresh air. In the event of symptoms seek for medical treatment.
Skin contact	In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.
Eye contact	In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.
Ingestion	Consult a doctor immediately. Do not induce vomiting. Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

No informations available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide.
Water spray jet.
Dry powder.
Foam.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Unknown risk of formation of toxic pyrolysis products.

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
High risk of slipping due to leakage/spillage of product.
Ensure adequate ventilation.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous earth).
Dispose of absorbed material in accordance with the regulations.

6.4 Reference to other sections

See Chapter 8+13

7 Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
No special measures necessary if used correctly.

**7.2 Conditions for safe storage, including any incompatibilities**

- Keep only in original container.
- Do not store together with oxidizing agents.
- Keep container tightly closed.
- Keep container in a well-ventilated place.

7.3 Specific end use(s)

See product use, Chapter 1.2

8 Exposure controls / personal protection**8.1 Control parameters**

Ingredients with occupational exposure limits to be monitored (GB) not applicable

8.2 Exposure controls

Additional advice on system design Ensure adequate ventilation on workstation.

Eye protection Safety glasses.

Hand protection

Nitrile rubber, >480 min (EN 374).

The details concerned are recommendations. Please contact the glove supplier for further information.

Skin protection

Light protective clothing of plastic material.

Other

Avoid contact with eyes and skin.

Do not inhale vapours.

It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin.

Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.

Remove soiled or soaked clothing immediately.

Do not eat, drink, smoke or take drugs at work.

After worktime and before work breaks the affected skin areas must be thoroughly cleaned.

Use barrier skin cream.

Respiratory protection

not applicable

Thermal hazards

No informations available.

Delimitation and monitoring of the environmental exposition

not determined


9 Physical and chemical properties
9.1 Information on basic physical and chemical properties

Form	liquid
Color	yellow
Odor	characteristic
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	165-260
Flash point [°C]	74
Flammability [°C]	not determined
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidizing properties	no
Vapour pressure [kPa]	< 0,013 (20°C)
Density [g/ml]	1,13 (20°C / 68,0°F)
Bulk density [kg/m³]	not applicable
Solubility in water	immiscible
Partition coefficient [n-octanol/water]	not determined
Viscosity	not applicable
Relative vapour density determined in air	not determined
Evaporation speed	not determined
Melting point [°C]	not determined
Autoignition temperature [°C]	not determined
Decomposition temperature	not determined

9.2 Other information

none

10 Stability and reactivity
10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with amines.

10.4 Conditions to avoid

No informations available.

10.5 Incompatible materials

See chapter 10.3.

10.6 Hazardous decomposition products

No hazardous decomposition products known.



11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Range [%]	Substance
80 - <100	Reaction product: bisphenol-A-(epichlorhydrin) Epoxy resin (number average molecular weight ≤ 700), CAS: 25068-38-6
	LD50, oral, Rat: 13600 mg/kg.

Serious eye damage/irritation not determined

Skin corrosion/irritation not determined

Respiratory or skin sensitisation not determined

Specific target organ toxicity — single exposure not determined

Specific target organ toxicity — repeated exposure not determined

Mutagenicity not determined

Reproduction toxicity not determined

Carcinogenicity not determined

General remarks

Toxicological data are not available.

The product was classified on the basis of the calculation procedure of the preparation directive.

12 Ecological information

12.1 Toxicity

12.2 Persistence and degradability

Behaviour in environment compartments not determined

Behaviour in sewage plant not determined

Biological degradability not determined

12.3 Bioaccumulative potential

No informations available.

12.4 Mobility in soil

No informations available.

12.5 Results of PBT and vPvB assessment

No informations available.

12.6 Other adverse effects

The product was classified on the basis of the calculation procedure of the preparation directive.


13 Disposal considerations
13.1 Waste treatment methods

Coordinate the waste disposal with the national authorities.

Product

Disposal in an incineration plant in accordance with the regulations of the local authorities.
Coordinate disposal with the authorities if necessary.

Waste no. (recommended)

080409*

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.
Untaminated packaging may be taken for recycling.

Waste no. (recommended)

150110*
150101
150102
150104

14 Transport information
14.1 UN number

See point 14.2 in accordance with UN shipping name

14.2 UN proper shipping name
Classification according to ADR

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy resin) 9 III

- Classification Code

M6

- Label

- ADR LQ

5 I

- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code) 3 (E)

Classification according to IMDG

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy resin) 9 III
MARINE POLLUTANT

- EMS

F-A, S-F

- Label

- IMDG LQ

5 I

Classification according to IATA

UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A Epoxy resin-mixture) 9 III

- Label

14.3 Transport hazard class(es)

See point 14.2 in accordance with UN shipping name

14.4 Packing group

See point 14.2 in accordance with UN shipping name

14.5 Environmental hazards

See point 14.2 in accordance with UN shipping name


14.6 Special precautions for user

Relevant information under points 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable



15 Regulatory information

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

EEC-REGULATIONS	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC
TRANSPORT-REGULATIONS	DOT-Classification, ADR (2011); IMDG-Code (2011, 35. Amdt.); IATA-DGR (2011).
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits with amendments October 2007. CHIP 3/ CHIP 4

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

16 Other informations

R-phrases (Chapter 03)	R 38: Irritating to skin. R 43: May cause sensitisation by skin contact. R 10: Flammable. R 20/22: Harmful by inhalation and if swallowed. R 37: Irritating to respiratory system. R 40: Limited evidence of a carcinogenic effect. R 52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R 68: Possible risk of irreversible effects. R 36/38: Irritating to eyes and skin. R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazard statements (Chapter 03)	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H226 Flammable liquid and vapour. H351 Suspected of causing cancer. H341 Suspected of causing genetic defects. H332 Harmful if inhaled. H302 Harmful if swallowed. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.
Observe employment restrictions for people	yes
VOC (1999/13/CE)	not applicable

Disclaimer: This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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