

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

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

1.1 Product identifier

Trade name : EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Product code : 08934801

Unique Formula Identifier (UFI) : V1T8-P0PG-600R-C2HE

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

Use of the Sub-stance/Mixture : Hardener
Professional use product

Recommended restrictions on use : Not applicable

1.3 Details of the supplier of the safety data sheet

Company : Adolf Wuerth GmbH & Co. KG
Reinhold-Würth-Str. 12-17
74653 Künzelsau

Telephone : +49 794015 0

Telefax : +49 794015 10 00

E-mail address of person responsible for the SDS : isi@wuerth.com

1.4 Emergency telephone number

+49 (0)6132 – 84463

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Serious eye damage, Category 1 H318: Causes serious eye damage.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

Long-term (chronic) aquatic hazard, Category 3

H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.

Response:

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Hazardous components which must be listed on the label:

Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide
1,3-Bis[3-(dimethylamino)propyl]urea

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version 7.7 Revision Date: 24.08.2023 SDS Number: 10664461-00012 Date of last issue: 26.07.2023
Date of first issue: 27.11.2014

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide	72244-98-5	Skin Sens. 1B; H317 Aquatic Chronic 3; H412	>= 90 - <= 100
1,3-Bis[3-(dimethylamino)propyl]urea	52338-87-1 257-861-2	Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 10 - < 20

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice.
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
- If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : In case of contact, immediately flush skin with soap and plenty of water.
Remove contaminated clothing and shoes.
Get medical attention.
Wash clothing before reuse.
Thoroughly clean shoes before reuse.
- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
If easy to do, remove contact lens, if worn.
Get medical attention immediately.
- If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention if symptoms occur.
Rinse mouth thoroughly with water.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

4.2 Most important symptoms and effects, both acute and delayed

Risks : May cause an allergic skin reaction.
Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Vapours may form explosive mixtures with air.
Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon oxides
Nitrogen oxides (NO_x)
Sulphur oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

6.2 Environmental precautions

Environmental precautions : Avoid release to the environment.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Do not breathe decomposition products.

Do not get on skin or clothing.
Avoid breathing mist or vapours.
Do not swallow.
Do not get in eyes.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
Keep container tightly closed.
Take care to prevent spills, waste and minimize release to the environment.

Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version 7.7 Revision Date: 24.08.2023 SDS Number: 10664461-00012 Date of last issue: 26.07.2023
Date of first issue: 27.11.2014

place. When using do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep in properly labelled containers. Keep tightly closed. Store in accordance with the particular national regulations.

Advice on common storage : Do not store with the following product types:
Strong oxidizing agents
Gases

Storage class (TRGS 510) : 10

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Hydrogen sulfide	7783-06-4	TWA	5 ppm 7 mg/m ³	2009/161/EU
		Further information: Indicative		
		STEL	10 ppm 14 mg/m ³	2009/161/EU
		Further information: Indicative		
		AGW	5 ppm 7,1 mg/m ³	DE TRGS 900
		Peak-limit: excursion factor (category): 2;(I)		
		Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child		

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide	Workers	Inhalation	Long-term systemic effects	22 mg/m ³
	Workers	Skin contact	Long-term systemic effects	2,7 mg/kg bw/day

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version 7.7 Revision Date: 24.08.2023 SDS Number: 10664461-00012 Date of last issue: 26.07.2023
Date of first issue: 27.11.2014

	Consumers	Inhalation	Long-term systemic effects	6,52 mg/m ³
	Consumers	Skin contact	Long-term systemic effects	1,61 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	1,9 mg/kg bw/day
1,3-Bis[3-(dimethylamino)propyl]urea	Workers	Inhalation	Long-term systemic effects	5,8 mg/m ³
	Workers	Inhalation	Acute systemic effects	17,4 mg/m ³
	Workers	Skin contact	Long-term systemic effects	2,33 mg/kg bw/day
	Workers	Skin contact	Acute systemic effects	4,8 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	0,833 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide	Fresh water	70 µg/l
	Marine water	7 µg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	0,322 mg/kg
	Marine sediment	0,032 mg/kg
1,3-Bis[3-(dimethylamino)propyl]urea	Soil	0,023 mg/kg
	Fresh water	93 µg/l
	Freshwater - intermittent	0,93 mg/l
	Marine water	9,3 µg/l
	Marine water - intermittent	93 µg/l
	Sewage treatment plant	1,8 mg/l
	Fresh water sediment	0,372 mg/kg dry weight (d.w.)
	Marine sediment	0,0372 mg/kg dry weight (d.w.)
	Soil	0,0198 mg/kg dry weight (d.w.)

8.2 Exposure controls

Engineering measures

Processing may form hazardous compounds (see section 10).
Ensure adequate ventilation, especially in confined areas.
Minimize workplace exposure concentrations.

Personal protective equipment

Eye/face protection : Wear the following personal protective equipment:
Chemical resistant goggles must be worn.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

If splashes are likely to occur, wear:
Face-shield
Equipment should conform to DIN EN 166

Hand protection

Material : Nitrile rubber
Break through time : 480 min
Glove thickness : > 0,26 mm
Directive : Equipment should conform to DIN EN 374

Material : Neoprene
Break through time : 480 min
Glove thickness : > 0,64 mm
Directive : Equipment should conform to DIN EN 374

Material : butyl-rubber
Break through time : 480 min
Glove thickness : > 0,6 mm
Directive : Equipment should conform to DIN EN 374

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
Equipment should conform to DIN EN 14387

Filter type : Combined inorganic gas/vapour and organic vapour type (AB)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid

Colour : colourless

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

Odour : characteristic, unpleasant

Odour Threshold : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling range : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : Ignitable (see flash point)

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Flash point : > 93,3 °C
Method: Pensky-Martens closed cup

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : 9 - 10
Concentration: 10 %

Viscosity
Viscosity, kinematic : No data available

Solubility(ies)
Water solubility : partly miscible

Partition coefficient: n-octanol/water : Not applicable

Vapour pressure : No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

Density : 1,12 g/cm³ (20 °C)

Relative vapour density : No data available

Particle characteristics
Particle size : Not applicable

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Evaporation rate : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Vapours may form explosive mixture with air.
Can react with strong oxidizing agents.
Hazardous decomposition products will be formed at elevated temperatures.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

Thermal decomposition : Hydrogen sulfide

SECTION 11: Toxicological information

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

Information on likely routes of exposure : Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Components:

Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide:

Acute oral toxicity : LD50 (Rat): 2.600 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 0,1 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 10.200 mg/kg

1,3-Bis[3-(dimethylamino)propyl]urea:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Remarks: Based on data from similar materials

Skin corrosion/irritation

Not classified based on available information.

Components:

Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

1,3-Bis[3-(dimethylamino)propyl]urea:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation
Remarks : Based on data from similar materials

Serious eye damage/eye irritation

Causes serious eye damage.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version 7.7 Revision Date: 24.08.2023 SDS Number: 10664461-00012 Date of last issue: 26.07.2023
Date of first issue: 27.11.2014

Components:

Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide:

Species : Rabbit
Result : No eye irritation

1,3-Bis[3-(dimethylamino)propyl]urea:

Species : Rabbit
Method : OECD Test Guideline 405
Result : Irreversible effects on the eye
Remarks : Based on data from similar materials

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Not classified based on available information.

Components:

Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide:

Test Type : Local lymph node assay (LLNA)
Exposure routes : Skin contact
Species : Mouse
Method : OECD Test Guideline 429
Result : positive

Assessment : Probability or evidence of low to moderate skin sensitisation rate in humans

1,3-Bis[3-(dimethylamino)propyl]urea:

Test Type : Magnusson-Kligman-Test
Exposure routes : Skin contact
Species : Guinea pig
Result : negative
Remarks : Based on data from similar materials

Germ cell mutagenicity

Not classified based on available information.

Components:

Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

Result: negative

Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

1,3-Bis[3-(dimethylamino)propyl]urea:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo
cytogenetic assay)
Species: Mouse
Application Route: Ingestion
Result: negative
Remarks: Based on data from similar materials

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Components:

1,3-Bis[3-(dimethylamino)propyl]urea:

Effects on fertility : Test Type: Reproduction/Developmental toxicity screening
test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 421
Result: negative

Effects on foetal develop- : Test Type: Reproduction/Developmental toxicity screening
ment test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 421
Result: negative

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide:

Species	:	Rat
NOAEL	:	75 mg/kg
LOAEL	:	250 mg/kg
Application Route	:	Ingestion
Exposure time	:	90 Days
Method	:	OECD Test Guideline 408

1,3-Bis[3-(dimethylamino)propyl]urea:

Species	:	Rat
NOAEL	:	> 300 mg/kg
Application Route	:	Ingestion
Exposure time	:	28 Days
Method	:	OECD Test Guideline 407
Remarks	:	Based on data from similar materials

Aspiration toxicity

Not classified based on available information.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
------------	---	---

SECTION 12: Ecological information

12.1 Toxicity

Components:

Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 87 mg/l
------------------	---	--

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version 7.7 Revision Date: 24.08.2023 SDS Number: 10664461-00012 Date of last issue: 26.07.2023
Date of first issue: 27.11.2014

Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 12 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : NOEC (Desmodesmus subspicatus (green algae)): 338 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

ErC50 (Desmodesmus subspicatus (green algae)): > 733 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 : > 1.000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 3,5 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

1,3-Bis[3-(dimethylamino)propyl]urea:

Toxicity to fish : LC50 (Oryzias latipes (Japanese medaka)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 93 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

EC10 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

12.2 Persistence and degradability

Components:

Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide:

Biodegradability : Result: Not readily biodegradable.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

Biodegradation: 5 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

1,3-Bis[3-(dimethylamino)propyl]urea:

Biodegradability : Result: Not readily biodegradable.
Method: OECD Test Guideline 301C
Remarks: Based on data from similar materials

12.3 Bioaccumulative potential

Components:

Reaction products of a polyol of pentaerythritol and propylene oxide, epichlorohydrin and hydrogen sulfide:

Partition coefficient: n- : log Pow: > 1,2
octanol/water

1,3-Bis[3-(dimethylamino)propyl]urea:

Partition coefficient: n- : log Pow: < 4
octanol/water

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

- Product** : Dispose of in accordance with local regulations.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
Do not dispose of waste into sewer.
- Contaminated packaging** : Empty containers should be taken to an approved waste handling site for recycling or disposal.
If not otherwise specified: Dispose of as unused product.
- Waste Code** : The following Waste Codes are only suggestions:
- used product
08 04 09, waste adhesives and sealants containing organic solvents or other hazardous substances
- unused product
08 04 09, waste adhesives and sealants containing organic solvents or other hazardous substances
- uncleaned packagings
15 01 10, packaging containing residues of or contaminated by hazardous substances
- Acc. Packaging Act properly emptied packaging:
Properly emptied, non-contaminated packaging of non-hazardous products can be supplied to a system for the collection of sales packaging.
-

SECTION 14: Transport information

14.1 UN number or ID number

- ADN** : Not regulated as a dangerous good
- ADR** : Not regulated as a dangerous good
- RID** : Not regulated as a dangerous good
- IMDG** : Not regulated as a dangerous good
- IATA** : Not regulated as a dangerous good

14.2 UN proper shipping name

- ADN** : Not regulated as a dangerous good
- ADR** : Not regulated as a dangerous good
- RID** : Not regulated as a dangerous good
- IMDG** : Not regulated as a dangerous good
- IATA** : Not regulated as a dangerous good

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version 7.7 Revision Date: 24.08.2023 SDS Number: 10664461-00012 Date of last issue: 26.07.2023
Date of first issue: 27.11.2014

14.3 Transport hazard class(es)

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.4 Packing group

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good
IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Conditions of restriction for the following entries should be considered:
Number on list 3

Substance(s) or mixture(s) are listed here according to their appearance in the regulation, irrespective of their use/purpose or the conditions of the restriction. Please refer to the conditions in corresponding Regulation to determine whether an entry is applicable to the placing on the market or not.

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that de- : Not applicable

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

plete the ozone layer

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Not applicable

Water hazard class (Germany) : WGK 2 obviously hazardous to water
Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : 5.2.1: Total dust:
Not applicable
5.2.2: Inorganic substances in powdered form:
Not applicable
5.2.4: Inorganic substances in gaseous form:
Not applicable
5.2.5: Organic Substances:
Not applicable
5.2.7.1.1: Carcinogenic substance:
Not applicable
5.2.7.1.1: Quartz fine dust PM4:
Not applicable
5.2.7.1.1: Formaldehyde:
Not applicable
5.2.7.1.1: fibres:
Not applicable
5.2.7.1.2: Germ cell mutagens:
Not applicable
5.2.7.1.3: Substances toxic to reproduction:
Not applicable
5.2.7.2: Poorly degradable, easily enrichable and highly toxic organic substances:
Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 0 %

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

regulations, where applicable.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Other information : Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Full text of H-Statements

H317 : May cause an allergic skin reaction.
H318 : Causes serious eye damage.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Chronic : Long-term (chronic) aquatic hazard
Eye Dam. : Serious eye damage
Skin Sens. : Skin sensitisation
2009/161/EU : Europe. COMMISSION DIRECTIVE 2009/161/EU establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC
DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.
2009/161/EU / TWA : Limit Value - eight hours
2009/161/EU / STEL : Short term exposure limit
DE TRGS 900 / AGW : Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878



EPOXY RESIN FAST BONDING ADHESIVE ESK-50 - 50 ML / 56 G (comp. B)

Version	Revision Date:	SDS Number:	Date of last issue: 26.07.2023
7.7	24.08.2023	10664461-00012	Date of first issue: 27.11.2014

Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Classification of the mixture:

Eye Dam. 1	H318
Skin Sens. 1	H317
Aquatic Chronic 3	H412

Classification procedure:

Calculation method
Calculation method
Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

DE / EN