

according to Commission Regulation (EU) 2020/878 as amended

Zalewa epoksydowa dwuskładnikowa 149

Creation date 24th August 2022 Revision date 15th February 2024

Version 9.0

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

Product identifier Zalewa epoksydowa dwuskładnikowa 149

Substance / mixture substance

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

CAS number 1675-54-3 EC (EINECS) number 216-823-5

Registration number 01-2119456619-26-0013

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

Substance's intended use

Encapsulation of electronic circuits

Substance uses advised against

The product should not be used in ways other then those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Name or trade name AG TermoPasty Grzegorz Gąsowski Address Kolejowa 33 E, Sokoły, 18-218

> Poland 200133730 PL9661767714

Identification number (CRN) VAT Reg No Phone 862741342 E-mail biuro@termopasty.pl Web address www.termopasty.pl

Competent person responsible for the safety data sheet

AG TermoPasty Grzegorz Gąsowski

E-mail biuro@termopasty.pl

1.4. **Emergency telephone number**

European emergency number: 112

SECTION 2: Hazards identification

Classification of the substance or mixture

Classification of the substance in accordance with Regulation (EC) No 1272/2008

The substance is classified as dangerous.

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

Most serious adverse effects on human health and the environment

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

2.2. **Label elements**

Hazard pictogram





Signal word

Warning

Dangerous substance

bis-[4-(2,3-epoxipropoxi)phenyl]propane (EC: 216-823-5; CAS: 1675-54-3)

Hazard statements

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.



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H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P262 Do not get in eyes, on skin, or on clothing.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

2.3. Other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.1. Substances

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 1675-54-3 EC: 216-823-5 Registration number: 01-2119456619-26- 0013	substance main component bis-[4-(2,3-epoxipropoxi)phenyl]propane	100	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Specific concentration limit: Skin Irrit. 2, H315: C ≥ 5 % Eye Irrit. 2, H319: C ≥ 5 %	

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

If in eves

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

If swallowed

Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment if the person has any health problems.

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

If inhaled

Not expected.

If on skin

May cause an allergic skin reaction.

If in eyes

Causes serious eye irritation.

If swallowed

Irritation, nausea.

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

Symptomatic treatment.



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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.

6.2. Environmental precautions

Do not allow to enter drains. Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent contact with skin and eyes. Contaminated work clothing should not be allowed out of the workplace. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains no substances for which occupational exposure limits are set.

8.2. Exposure controls

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.



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Respiratory protection

It is not needed.

Thermal hazard

Data not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state liquid Colour yellow Odour characteristic Melting point/freezing point 30-50 °C

Boiling point or initial boiling point and boiling range data not available non-inflammable Flammability data not available Lower and upper explosion limit

266 °C Flash point 490 °C Auto-ignition temperature

data not available Decomposition temperature 7 (undiluted) Kinematic viscosity data not available 20000-30000 mPas Viscosity

Solubility in water 6.9 mg/l Partition coefficient n-octanol/water (log value) 3.242

Vapour pressure data not available

Density and/or relative density

Density 1.16 g/cm³ Relative vapour density data not available Particle characteristics data not available liquid

Form

9.2. Other information

> Evaporation rate data not available

Explosive properties The product does not have explosive properties.

SECTION 10: Stability and reactivity

10.1. Reactivity

not available

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

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

No toxicological data is available for the mixture.



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Acute toxicity

Based on available data the classification criteria are not met.

bis-[4-(2,3-epoxipropoxi)phenyl]propane						
Route of exposure	Parameter	Value	Exposure time	Species	Sex	
Oral	LD ₅₀	>2000 mg/kg		Rat	М	
Oral	LD ₅₀	>15000 mg/kg		Rat	F	
Dermal	LD ₅₀	>2000 mg/kg		Rat	F/M	
Dermal	LD ₅₀	>3450 mg/kg		Rabbit	F	

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or 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.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - 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

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

Acute toxicity

bis-[4-(2,3-epoxipropoxi)phenyl]propane					
Parameter	Value	Exposure time	Species	Environment	
LC50	1.2 mg/l		Fish (Oncorhynchus mykiss)	\/ 0	
EC50	1.8 mg/l		Crustaceans (Daphnia magna)	Y /	



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bis-[4-(2,3-epoxipropoxi)phenyl]propane					
Parameter	Value	Exposure time	Species	Environment	
EC50	9.4 mg/l	72 hours	Algae (Selenastrum capricornutum)		
LOEC	1 mg/l	21 days	Daphnia magna		
NOEC	0.3 mg/l	21 days	Daphnia magna		

12.2. Persistence and degradability

not available

12.3. Bioaccumulative potential

Data not available.

12.4. Mobility in soil

Data not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

12.7. Other adverse effects

Data not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number or ID number

UN 3082

14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)

14.3. Transport hazard class(es)

9 Miscellaneous dangerous substances and articles

14.4. Packing group

III

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant





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Additional information

Hazard identification No.

UN number

Classification code

Safety signs

90 3082

M6

9+hazardous for the environment



Tunnel restriction code

Air transport - ICAO/IATA

Packaging instructions passenger Cargo packaging instructions

Marine transport - IMDG

EmS (emergency plan)

(-)

964

964

F-A, S-F

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

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.

Guidelines for safe handling used in the safety data sheet

P262 Do not get in eyes, on skin, or on clothing.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR European agreement concerning the internat<mark>ional carriage of dangerou</mark>s goods by

road

BCF Bioconcentration Factor
CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of

substance and mixtures

EC Identification code for each substance listed in EINECS

EC50 Concentration of a substance when it is affected 50% of the population EINECS European Inventory of Existing Commercial Chemical Substances



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EmS Emergency plan
EU European Union

EuPCS European Product Categorisation System IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying

Dangerous Chemicals

ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
IMO International Maritime Organization

INCI International Nomenclature of Cosmetic Ingredients
ISO International Organization for Standardization
IUPAC International Union of Pure and Applied Chemistry

LC50 Lethal concentration of a substance in which it can be expected death of 50% of the

population

LD50 Lethal dose of a substance in which it can be expected death of 50% of the

population

log KowOctanol-water partition coefficientNOECNo observed effect concentrationOELOccupational Exposure LimitsPBTPersistent, Bioaccumulative and Toxic

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Agreement on the transport of dangerous goods by rail

UN Four-figure identification number of the substance or article taken from the UN

Model Regulations

UVCB Substances of unknown or variable composition, complex reaction products or

biological materials

VOC Volatile organic compounds

vPvB Very Persistent and very Bioaccumulative

Aquatic Chronic Hazardous to the aquatic environment (chronic)

Eye Irrit. Eye irritation
Skin Irrit. Skin irritation
Skin Sens. Skin sensitization

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 9.0 replaces the SDS version from 03 March 2023. Changes were made in sections 2, 11, 12, 15 and 16.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.