

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date 03rd March 2023
Revision date Version 12.0

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

- 1.1. Product identifier**
Substance / mixture Utwardzacz (do zalew epoksydowych 141,149)
substance
Chemical name Trietylenotetraamina
CAS number 90640-67-8
EC (EINECS) number 292-588-2
Registration number 01-2119487919-13-XXXX
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Substance's intended use
Hardener.
Substance uses advised against
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Supplier
Name or trade name AG TermoPasty Grzegorz Gąsowski
Address Kolejowa 33 E, Sokoły, 18-218
Poland
Identification number (CRN) 200133730
VAT Reg No PL9661767714
Phone 862741342
E-mail biuro@termopasty.pl
Web address www.termopasty.pl
- Competent person responsible for the safety data sheet**
Name AG TermoPasty Grzegorz Gąsowski
E-mail biuro@termopasty.pl
- 1.4. Emergency telephone number**
European emergency number: 112

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the substance in accordance with Regulation (EC) No 1272/2008

The substance is classified as dangerous.

Acute Tox. 4, H302+H312
Skin Corr. 1B, H314
Skin Sens. 1, H317
Eye Dam. 1, H318
Aquatic Chronic 3, H412

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

Most serious adverse effects on human health and the environment

Causes severe skin burns and eye damage. May cause an allergic skin reaction. Harmful if swallowed or in contact with skin. Harmful to aquatic life with long lasting effects.

- 2.2. Label elements**
Hazard pictogram



Signal word
Danger

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date 03rd March 2023
Revision date Version 12.0

Dangerous substance

Trietylenotetraamina
(EC: 292-588-2; CAS: 90640-67-8)
Polietylenopoli-aminy, frakcja
tetraetylenopenta- aminowa
(EC: 292-587-7; CAS: 90640-66-7)
2-piperazin-1-ylethylamine
(Index: 612-105-00-4; CAS: 140-31-8)
2,2'-iminodiethylamine
(Index: 612-058-00-X; CAS: 111-40-0)
2-(2-aminoethylamino)ethanol
(Index: 603-194-00-0; CAS: 111-41-1)

Hazard statements

H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
H302+H312 Harmful if swallowed or in contact with skin.

Precautionary statements

P261 Avoid breathing mist/vapours/spray.
P262 Do not get in eyes, on skin, or on clothing.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Chemical characterization

Mixture of substances and additives specified below.

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 90640-67-8 EC: 292-588-2 Registration number: 01-2119487919-13-XXXX	substance main component Trietylenotetraamina	≤96	Acute Tox. 4, H302+H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Aquatic Chronic 3, H412	
CAS: 90640-66-7 EC: 292-587-7 Registration number: 01-2119487290-37-XXXX	Polietylenopoli-aminy, frakcja tetraetylenopenta- aminowa	<1,5	Acute Tox. 4, H302+H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Aquatic Chronic 2, H411	
Index: 612-105-00-4 CAS: 140-31-8 EC: 205-411-0 Registration number: 01-2119471486-30-XXXX	2-piperazin-1-ylethylamine	<1,5	Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Repr. 2, H361 STOT RE 1, H372 Aquatic Chronic 3, H412	

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date	03rd March 2023	Version	12.0
Revision date			

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 612-058-00-X CAS: 111-40-0 EC: 203-865-4 Registration number: 01-2119473793-27-XXXX	2,2'-iminodiethylamine	<1	Acute Tox. 4, H302+H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Acute Tox. 1, H330 STOT SE 3, H335	
Index: 603-194-00-0 CAS: 111-41-1 EC: 203-867-5 Registration number: 01-2119456894-24-XXXX	2-(2-aminoethylamino)ethanol	<0,3	Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 STOT SE 3, H335 Repr. 1B, H360Df Lact., H362 Specific concentration limit: STOT SE 3, H335: C ≥ 5 %	1

Notes

1 The use of the substance is restricted by Annex XVII of REACH Regulation

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 unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Take care of your own safety, do not let the affected person walk! Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

If on skin

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Rinse skin with water/shower. Rinse cautiously with water for several minutes.

If in eyes

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. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

If swallowed

DO NOT INDUCE VOMITING - there is danger of further damage to the gastrointestinal tract!!! Danger of esophageal and gastric perforation! RINSE THE MOUTH WITH WATER IMMEDIATELY AND LET THE PERSON DRINK 2-5 dl of cold water to reduce the heating effect of the corrosive substance. Consuming larger amounts of liquid is not advisable as it may induce vomiting and potential inhaling of the corrosive substances in the lungs. The affected person must not be forced to drink, particularly if already feeling pain in the mouth or throat. In this case let the affected person only rinse the mouth with water. DO NOT PROVIDE ACTIVATED CARBON! Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible.

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date	03rd March 2023	Version	12.0
Revision date			

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

If inhaled

Inhaling vapours can cause corrosion of the breathing system.

If on skin

Causes severe skin burns. May cause an allergic skin reaction.

If in eyes

Causes serious eye damage.

If swallowed

Corrosion of the digestion system can occur.

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

Symptomatic treatment.

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

Use a self-contained breathing apparatus and full-body protective clothing. Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. 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. Do not inhale aerosols. Prevent contact with skin and eyes.

6.2. Environmental precautions

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 formation of gases and vapours in concentrations exceeding the occupational exposure limits. Do not inhale aerosols. 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. Do not eat, drink or smoke when using this product. 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. Store locked up.

7.3. Specific end use(s)

Hardener.

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date	03rd March 2023	Version	12.0
Revision date			

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

DNEL

2,2'-iminodiethylamine

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	92.1 mg/m ³	Acute effects systemic		
Workers	Inhalation	2.6 mg/m ³	Acute effects local		
Workers	Dermal	11.4 mg/kg bw/day	Chronic effects systemic		
Workers	Inhalation	15.4 mg/m ³	Chronic effects systemic		
Workers	Dermal	1.1 mg/cm ²	Chronic effects local		
Workers	Inhalation	0.87 mg/m ³	Chronic effects local		
Consumers	Dermal	4.88 mg/kg bw/day	Acute effects systemic		
Consumers	Inhalation	27.5 mg/m ³	Acute effects systemic		
Consumers	Dermal	4.88 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	4.6 mg/m ³	Chronic effects systemic		

Polietylenopoli-aminy, frakcja tetraetylenopenta- aminowa

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	0.25 mg/m ³	Chronic effects local		
Workers	Dermal	0.25 mg/m ³	Chronic effects local		
Consumers	Dermal	20.8 µg/cm ²	Chronic effects local		
Consumers	Inhalation	0.14 mg/m ³	Chronic effects systemic		
Consumers	Oral	0.21 mg/kg bw/day	Chronic effects systemic		

Trietylenotetraamina

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	0.54 mg/m ³	Chronic effects systemic		
Consumers	Inhalation	0.096 mg/m ³	Chronic effects systemic		
Consumers	Oral	0.14 mg/kg bw/day	Chronic effects systemic		

PNEC

2,2'-iminodiethylamine

Route of exposure	Value	Value determination	Source
Drinking water	0.56 mg/l		
Marine water	0.056 mg/l		
Freshwater sediment	1072 mg/kg of dry substance		

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date

03rd March 2023

Revision date

Version

12.0

2,2'-iminodiethylamine

Route of exposure	Value	Value determination	Source
Sea sediments	107.2 mg/kg of dry substance		
Soil (agricultural)	7.97 mg/kg		
Microorganisms in sewage treatment	6 mg/l		
Water (intermittent release)	0.32 mg/l		

Polietylenopoli-aminy, frakcja tetraetylenopenta- aminowa

Route of exposure	Value	Value determination	Source
Drinking water	0.01 mg/l		
Marine water	0.001 mg/l		
Freshwater sediment	3198 mg/kg of dry substance		
Sea sediments	0.3198 mg/kg of dry substance		
Soil (agricultural)	2.5 mg/kg of dry substance		
Microorganisms in sewage treatment	4.6 mg/l		
Water (intermittent release)	0.068 mg/l		

Trietylenotetraamina

Route of exposure	Value	Value determination	Source
Drinking water	0.0268 mg/l		
Marine water	0.00268 mg/l		
Freshwater sediment	8572 mg/kg of dry substance		
Sea sediments	0.8572 mg/kg of dry substance		
Soil (agricultural)	1.25 mg/kg of dry substance		
Microorganisms in sewage treatment	0.13 mg/l		
Water (intermittent release)	0.2 mg/l		

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. 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 or face shield (based on the nature of the work performed).

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.

Respiratory protection

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

Thermal hazard

Not available.

Environmental exposure controls

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

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date 03rd March 2023
Revision date Version 12.0

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	yellow
Odour	characteristic
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	275 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	118 °C
Auto-ignition temperature	325 °C
Decomposition temperature	data not available
pH	13,2 (50 wody% solution)
Kinematic viscosity	data not available
Solubility in water	soluble
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	log Pow -2,65
Vapour pressure	0,346 Pa at 20 °C
Density and/or relative density	
Density	0,98 g/cm ³ at 20 °C
Relative vapour density	data not available
Particle characteristics	data not available
Form	liquid

9.2. Other information

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.

Acute toxicity

Harmful if swallowed or in contact with skin.

2,2'-iminodiethylamine

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LOAEL		530-620 mg/kg bw	90 days	Rat	

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date

03rd March 2023

Revision date

Version

12.0

Polietylenopoli-aminy, frakcjatetraetylenopenta- aminowa

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LOAEL	OECD 408	50 mg/kg	90 days	Rat	M

Trietylenotetraamina

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Skin	LC ₅₀		1716 mg/kg		Rat	
Oral	LD ₅₀		1465 mg/kg		Rat	
Oral	LOAEL	OECD 408	50 mg/kg	90 days	Rat	M

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes severe skin burns and eye damage.

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. Based on available data the classification criteria are not met.

11.2. Information on other hazards

not available

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Harmful to aquatic life with long lasting effects.

Polietylenopoli-aminy, frakcjatetraetylenopenta- aminowa

Parameter	Value	Exposure time	Species	Environment
LC ₅₀	0.42 g/l		Fish (Poecilia reticulata)	
EC ₅₀	21.1 mg/l		Crustaceans (Daphnia magna)	
EC ₅₀	6.8 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	

Trietylenotetraamina

Parameter	Value	Exposure time	Species	Environment
LC ₅₀	330 mg/l		Pimephales promelas	
EC ₅₀	31.1 mg/l		Daphnia (Daphnia magna)	

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date 03rd March 2023
Revision date Version 12.0

Trietylenotetraamina

Parameter	Value	Exposure time	Species	Environment
EC ₅₀	20 mg/l	72 hours	Algae and other aquatic plants (Pseudokirchneriella subcapitata)	

12.2. Persistence and degradability

Biodegradability

Trietylenotetraamina

Parameter	Value	Exposure time	Environment	Result
				Hardly biodegradable

Not available.

12.3. Bioaccumulative potential

Trietylenotetraamina

Parameter	Value	Exposure time	Species	Environment	Temperature [°C]
Log Pow	-2.65				

Not available.

12.4. Mobility in soil

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

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 2259

14.2. UN proper shipping name

TRIETHYLENETETRAMINE

14.3. Transport hazard class(es)

8 Corrosive substances

14.4. Packing group

II - substances presenting medium danger

14.5. Environmental hazards

not relevant

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date	03rd March 2023	Version	12.0
Revision date			

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

Additional information

Hazard identification No.

80

UN number

2259

Classification code

C7

Safety signs

8



Air transport - ICAO/IATA

Packaging instructions passenger

851

Cargo packaging instructions

855

Marine transport - IMDG

EmS (emergency plan)

F-A, S-B

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.

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date

03rd March 2023

Revision date

Version

12.0

Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended

2-(2-aminoethylamino)ethanol

Restriction	Conditions of restriction
30	<p>Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30:</p> <p>1. Shall not be placed on the market, or used,</p> <ul style="list-style-type: none">– as substances,– as constituents of other substances, or,– in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than:<ul style="list-style-type: none">– either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,– the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008. <p>Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:</p> <p>“Restricted to professional users”.</p> <p>2. By way of derogation, paragraph 1 shall not apply to:</p> <ul style="list-style-type: none">(a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;(b) cosmetic products as defined by Directive 76/768/EEC;(c) the following fuels and oil products:<ul style="list-style-type: none">– motor fuels which are covered by Directive 98/70/EC,– mineral oil products intended for use as fuel in mobile or fixed combustion plants,– fuels sold in closed systems (e.g. liquid gas bottles);(d) artists’ paints covered by Regulation (EC) No 1272/2008;(e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date.(f) devices covered by Regulation (EU) 2017/745.

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

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H360Df	May damage the unborn child. Suspected of damaging fertility.
H361	Suspected of damaging fertility or the unborn child.
H362	May cause harm to breast-fed children.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H302+H312	Harmful if swallowed or in contact with skin.

Guidelines for safe handling used in the safety data sheet

P261	Avoid breathing mist/vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date	03rd March 2023	Version	12.0
Revision date			

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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 international carriage of dangerous 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
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
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
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEL	Lowest observed adverse effect level
log K _{ow}	Octanol-water partition coefficient
OEL	Occupational Exposure Limits
PBT	Persistent, 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

Acute Tox.	Acute toxicity
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Eye Dam.	Serious eye damage
Lact.	Lactation
Repr.	Reproductive toxicity
Skin Corr.	Skin corrosion
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

SAFETY DATA SHEET



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

Utwardzacz (do zalew epoksydowych 141,149)

Creation date	03rd March 2023	Version	12.0
Revision date			

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 12.0 replaces the SDS version from 08 September 2022. Changes were made in sections 1, 2, 12, 15 and 16.

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.