

SAFETY DATA SHEET 	Revision date: 26.04.2023 VERSION: 3.0/EN
SAFETY DATA SHEET PUR D4 polyurethane adhesive	

prepared in accordance with Commission Regulation (EU) No 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)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

PUR D4 polyurethane adhesive

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

Identified uses: One-component polyurethane adhesive for local repairs of raised parquet flooring. Detailed information on the use, properties and method of application of the product can be found in the technical data sheet.

SU 3 Industrial uses

SU 22 Professional uses

Uses advised against: Other than indicated above

1.3 Details of the supplier of the safety data sheet

Zakłady Chemiczne „ANSER” Sp. z o.o.

ul. Dźwigowa 3/2, 02-437 Warszawa, Poland

Tel.: +48 46 856 73 40 fax: +48 46 856 73 50

email: a.zagajewska@anser.pl

1.4 Emergency telephone number

Emergency telephone number in Poland (available 8:00 a.m. – 4:00 p.m.): +48 46 856 73 40

112 (emergency number), 998 (fire brigade), 999 (medical emergency)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008:

Hazards arising from physicochemical properties:

The mixture is not classified as hazardous with regard to physicochemical properties.

Hazards to health

Skin irritation, Hazard Category 2 [Skin Irrit. 2]

Causes skin irritation (H315)

Eye irritation, Hazard Category 2 [Eye Irrit. 2]

Causes eye irritation (H319)

Skin sensitisation, Hazard Category 1 [Skin Sens. 1]

May cause an allergic skin reaction (H317)

Carcinogenicity, Hazard Category 2 [Carc. 2]

Suspected of causing cancer (H351)

Reproductive toxicity, Hazard Category 2 [Repr. 2]

Suspected of damaging fertility or the unborn child (H361)

Respiratory sensitisation, Hazard Category 1; 1A; 1B [Resp. Sens. 1]

May cause allergy or asthma symptoms or breathing difficulties if inhaled (H334)

Specific target organ toxicity — single exposure, Hazard Category 3 [STOT SE 3]

May cause respiratory irritation (H335)

Specific target organ toxicity — repeated exposure, Hazard Category 2 [STOT RE 2]

May cause damage to organs through prolonged or repeated exposure (H373)

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Hazards to the environment:

Hazardous to the aquatic environment — chronic hazard, Category 3 [Aquatic Chronic 3]

Harmful to aquatic life with long lasting effects (H412)

2.2 Label elements

Pictogram

GHS08 GHS07

Signal word: DANGER

Names of hazardous constituents on label:

Diphenylmethane diisocyanate, isomers and homologues; Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane [3]

Hazard statement(s) (H)

H317 May cause an allergic skin reaction.

H315 Causes skin irritation

H319 Causes eye irritation

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation

H351 Suspected of causing cancer

H361 Suspected of damaging fertility or the unborn child

H373 May cause damage to organs through prolonged or repeated exposure

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s) (P)

General:

P201 Obtain special instructions before use.

P271 Use only outdoors or in a well-ventilated area

P260 Do not breathe vapour/spray

Prevention:

P280 Wear protective clothing/eye protection/face protection.

Response:

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

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501 Dispose of contents/container in accordance with national regulations

Supplemental hazard information:

EUH204 - Contains isocyanates. May produce an allergic reaction.

2.3 Other hazards

The product reacts with water to form CO₂. The reaction does not proceed hazardously, but the product loses its performance properties (the reaction produces harmless amines in solid form).

The substances contained in the product do not meet the PBT or vPvB criteria in accordance with Annex XIII to the REACH Regulation.

PBT substances (persistent, bioaccumulative and toxic substances)

vPvB substances (substances that are very persistent and very bioaccumulative)

The product does not contain substances included in the list drawn up in accordance with Article 59(1) as having endocrine-disrupting properties, or substances identified as having endocrine-disrupting properties in accordance with the criteria set out

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in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Not applicable

3.2 Mixture

Identification numbers	Chemical name	wt. %	Pictogram, signal word codes	Hazard class and category codes	H-statement codes
CAS: 9016-87-9 EC: — Index No: — Registration No: Polymer exempt from REACH registration In accordance with Art. (9) REACH	Diphenylmethane diisocyanate, isomers and homologues	45<x<50	GHS08 GHS07 Dgr	Carc. 2 Acute Tox. 4 Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 Skin Sens. 1 STOT RE 2 Resp. Sens. 1	H351 H332 H319 H335 H315 H317 H373 H334
CAS: — EC: 924-168-8 Index No: — Own registration No: 01-2119475133-43-xxxx	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane [3]	<5	GHS02 GHS08 GHS05 GHS09 Dgr	Flam. Liq. 3 Skin Irrit. 2 Asp. Tox. 1 Repr. 2 STOT SE 3 STOT RE 2 Aquatic Chronic 2	H225 H315 H304 H361 H336 H373 H411
CAS: 6425-39-4 EC: 229-194-7 Index No: — Own registration No: 01-2119969278-20-xxxx	2,2-dimorpholinodiethyl ether (DMDEE)	<2	GHS07 Wng	Eye Irrit. 2	H319

Note 1: Complex mixture of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. UVCB substance. Content of substance constituents: Benzene ≤10 ppm CAS: 71-43-2 Toluene ≤10 ppm CAS: 108-88-3 n-hexane 6-60 CAS: 110-54-3

The full text of the H-statements is given in Section 16 of the Safety Data Sheet.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General recommendations: Symptoms of poisoning may appear after a dozen or so hours; therefore, medical observation for at least 48 hours from the time of exposure is recommended. If any symptoms occur and persist after first aid has been administered in accordance with the recommendations below, seek medical advice immediately.

Inhalation: Remove or move the affected person away from the area of exposure, place them in a comfortable half-lying or sitting position, keep them calm, and protect them from loss of body heat. Call a doctor immediately.

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Skin contact: Remove contaminated clothing and wash the skin thoroughly with lukewarm running water. Appropriate safety showers should be available at the workplace.

Eye contact: Rinse with a large amount of cool water, preferably running water, for at least 15 minutes. Remove contact lenses. Avoid a strong stream of water because of the risk of mechanical damage to the cornea. If irritation persists, consult an ophthalmologist.

Digestive tract: Seek medical attention immediately. Do NOT induce vomiting – risk of aspiration into the lungs. If natural reflex vomiting occurs, keep the affected person leaning forward. If breathing difficulties occur, administer oxygen.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: Causes skin irritation. In sensitised persons, a strong allergic reaction may occur even with very small amounts of the product.

Eye contact: Causes eye irritation. Watering, redness, burning, irritation, blurred vision.

Inhalation: Inhalation of vapours at high concentration may cause fatigue, weakness, drowsiness, nausea, headache and dizziness, sore throat. Repeated contact with the vapours of the product may cause allergic reactions of the respiratory tract (swelling, hoarseness, a feeling of choking, coughing). May cause allergy or asthma symptoms or breathing difficulties if inhaled.

After ingestion: Possible irritation of the mouth, throat and oesophagus

Additional exposure effects: Suspected of causing cancer; Suspected of damaging fertility or the unborn child; May cause damage to organs through prolonged or repeated exposure

4.3 Indication of any immediate medical attention and special treatment needed

Show this safety data sheet or the label/package to the medical personnel providing assistance. Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

Foam, carbon dioxide, extinguishing powders, water – water spray.

Unsuitable extinguishing media:

Do not use a solid (jet) stream of water

5.2 Special hazards arising from the substance or mixture

During combustion, toxic combustion products may form, including carbon oxides and other unidentified thermal decomposition products. Avoid inhaling combustion products, which may pose a health hazard.

5.3 Advice for firefighters

Follow the procedures applicable to fighting chemical fires. Use general protective measures typical of firefighting. Do not remain in the fire-endangered zone without appropriate chemical-resistant clothing and self-contained breathing apparatus. Collect used extinguishing agents. Remain in the danger zone only with self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For persons who are not emergency responders:

Restrict access of unauthorised persons to the area of the incident until the appropriate clean-up operations have been completed. In the event of large spills, isolate the endangered area. Use personal protective equipment. Avoid contamination of the eyes and skin. Ensure adequate ventilation.

For emergency responders:

Ensure that only trained personnel carry out the clean-up of the incident and its consequences. Use personal protective equipment.

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6.2 Environmental precautions

Do not allow the product to enter drains, water bodies or soil. In the event of a release of large quantities of the product, notify the relevant authorities.

6.3 Methods and material for containment and cleaning up

Protect drains.

If possible, eliminate leaks (seal the leak, place damaged packaging in a tightly sealed protective container). Cover the spilled product with sand or earth moistened with a solution prepared from 3-8% ammonia, 0.2-2% detergent and water (up to 100%) or from 5-10% sodium carbonate, 0.2-2% detergent and water (up to 100%). After 30 minutes, collect the product into a labelled container. Rinse the contaminated surface with water. Do not use sawdust or other flammable materials as absorbents. Dispose of the contaminated material as waste, in accordance with Section 13.

6.4 Reference to other sections

Personal protective equipment – see Section 8. Dispose of in accordance with the recommendations given in Section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Work in accordance with occupational health and safety rules. Avoid contact with eyes and skin. Avoid inhaling product vapours. Wash hands before breaks and after finishing work. Keep unused containers tightly closed. Ensure proper ventilation of the room where the product is stored and used. Remove sources of ignition, do not smoke. Use personal protective equipment. Use as intended. In addition: avoid creating aerosols; do not wear clothing contaminated with the product. The product should not be used by people suffering from asthma. Avoid contact of the substance with water during work and storage.

7.2 Conditions for safe storage, including any incompatibilities

Store in a designated, well-ventilated place. Store in the original, tightly closed container. Containers that have been opened must be resealed and stored upright to prevent the substance from escaping.

7.3 Specific end use(s)

See Section 1.2 of the SDS

No information on other uses.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

PL: Benzene [71-43-2]

OEL (TWA) 1.6 mg/m³

OEL (STEL) not established

PL: n-hexane [110-54-3]

OEL (TWA) 72 mg/m³

PL: Toluene [108-88-3]

OEL (TWA) 100 mg/m³

OEL (STEL) 200 mg/m³

Legal basis (Poland):

Regulation of the Polish Minister of Family, Labour and Social Policy of 12 June 2018 on maximum permissible concentrations and intensities of factors harmful to health in the workplace, Journal of Laws 2018.1286 of 3 July 2018, as amended [Journal of Laws 2020.61 of 17 January 2020]

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Regulation of the Minister of Development, Labour and Technology of 18 February 2021 amending the regulation on maximum permissible concentrations and intensities of factors harmful to health in the workplace [Journal of Laws 2021, item 325]

Regulation of the Minister of Health of 2 February 2011 on testing and measurement of factors harmful to health in the workplace (Journal of Laws No. 33, item 166, 2011; as amended by Journal of Laws 2022.2662).

EU

Toluene [108-88-3]

TWA (8h): 192 mg/m³ / 50 ppm STEL (15 min): 384 mg/m³ / 100 ppm

n-hexane [110-54-3]

TWA (8h): 72 mg/m³ / 20 ppm STEL (15 min): —

Benzene [71-43-2]

TWA (8h): 3.25 mg/m³ / 1 ppm STEL (15 min): —

Legal basis (EU):

Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC). Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work. Directive 2004/37/EC of the European Parliament and of the Council of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (sixth individual Directive within the meaning of Article 16(1) of Council Directive 89/391/EEC). Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC. Directive 2004/37/EC of the European Parliament and of the Council of 29 April 2004 on the protection of workers from the risks related to exposure to carcinogens or mutagens at work (sixth individual Directive within the meaning of Article 16(1) of Council Directive 89/391/EEC). Commission Directive 2009/161/EU of 17 December 2009 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. Commission Directive (EU) 2017/164 of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.

DNEL and PNEC values:

No data available

Recommended monitoring procedures

Procedures for monitoring the concentrations of hazardous components in the air and procedures for controlling air purity in the workplace should be applied – where available and justified for the given position – in accordance with the relevant Polish or European Standards, taking into account the conditions prevailing at the place of exposure and appropriate measurement methodology adapted to working conditions. The mode, type and frequency of tests and measurements should meet the requirements set out in the Regulation of the Minister of Health of 2 February 2011 (Journal of Laws 2011 No. 33, item 166).

8.2 Exposure controls

8.2.1 Appropriate technical control measures

If the exposure level exceeds the OEL, appropriate respiratory protective equipment is required

8.2.2 Individual protection measures, such as personal protective equipment

When the concentration of hazardous substances is established and known, the selection of personal protective equipment should take into account the concentration of the substance at the given workplace, the duration of exposure, the activities performed by the worker and the recommendations given by the manufacturer of the protective equipment. In an emergency situation, or when the concentration of the substance at the workplace is not known, use personal protective equipment that isolates the body (a gas-tight suit combined with isolating respiratory protective equipment).

Respiratory protection: Under normal conditions, with adequate ventilation, not necessary; required when exposed to high vapour concentrations of the product. If the permissible vapour concentration of the product is exceeded, respiratory

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protection with a particulate filter marked white with the symbol P2 and a vapour filter marked brown with the letter A should be used.

Hands and skin: Wear protective clothing made of natural materials (cotton), gloves made of nitrile rubber (thickness 1.25 mm, breakthrough time 480 min), butyl rubber (thickness 0.5 mm, breakthrough time 480 min), fluorine rubber (thickness 0.7 mm, breakthrough time 480 min). The material from which the gloves are made must be impermeable and resistant to the product. The resistance of the glove material must be checked before use. Information on the permeation time of the substance through the gloves should be obtained from the glove manufacturer and this time must be observed. It is recommended to change gloves regularly and replace them immediately if any signs of wear, damage (tears, punctures) or changes in appearance (colour, elasticity, shape) occur. The use of suitable protective creams is recommended to prevent excessive drying of the skin.

Eyes: Use certified goggle-type protective eyewear. It is recommended to equip the workplace with an eyewash station.

Occupational hygiene: General industrial occupational hygiene rules apply. Remove contaminated clothing after finishing work. Wash hands and face before breaks. Wash the whole body thoroughly after work. Do not eat, drink or smoke while working.

8.2.3 Environmental exposure controls

Any emissions from ventilation systems and process equipment should be checked to determine their compliance with environmental protection requirements.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state: Liquid

Colour: Brown

Odour: Characteristic

Melting point/freezing point: No data available

Boiling point and boiling range: No data available

Flammability: No data available

Lower and upper explosive limit: No data available

Flash point: No data available

Auto-ignition temperature [gases, liquids]: No data available

Decomposition temperature: No data available

pH: No data available

Kinematic viscosity [mm²/s]: No data available

Solubility: Insoluble in water (MDI is hydrolytically unstable; in aqueous solutions it decomposes rapidly)

Partition coefficient: n-octanol/water: No data available

Vapour pressure: No data available

Relative density: 1.07 g/cm³

Relative vapour density: No data available

Particle characteristics [solid]: No data available

9.2 Other information

9.2.1 Information on physical hazard classes

No additional test results.

9.2.2 Other safety properties

No additional test results.

SECTION 10: STABILITY AND REACTIVITY

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10.1 Reactivity

No reactivity under the conditions of storage and handling in accordance with intended use.

10.2 Chemical stability

The product is stable under normal conditions of use and storage. The main mechanism of MDI decomposition in the environment is hydrolysis. MDI reacts quickly with water, mainly forming hard, insoluble polyureas. In the case of multiple contacts with the environment, the dispersion of the isocyanate is relatively weak; the surface reaction at the contacting surface leads to the formation of a hard layer, covering the partially reacted or unreacted substance. This layer restricts access of water and the release of amines, slowing down and altering hydrolysis.

Stability in organic solvents: Every MDI isomer and its forms are very unstable in dimethyl sulfoxide (DMSO) solvents; water content in DMSO accelerates decomposition. MDI is more stable in ethylene glycol dimethyl ether (EGDE) solvent.

10.3 Possibility of hazardous reactions

The reaction with cold or warm water (< 50 °C) is slow; with hot water or steam, the reaction is much faster and, due to the formation of carbon dioxide, also causes an increase in pressure. With acids, alcohols, amines, bases and oxidising agents, it may cause fire and increases the risk of explosion.

10.4 Conditions to avoid

Avoid high temperatures. Protect from sunlight and frost.

10.5 Incompatible materials

Avoid strong oxidisers, flammable substances, explosive materials, organic peroxides, strong acids

10.6 Hazardous decomposition products

Depending on the decomposition conditions, complex mixtures of chemical substances may be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds. For more information, see Section 5.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity of components

2,2-dimorpholinodiethyl ether (DMDEE)

LD50 > 2,025 mg/kg (oral, rat)

LD50 > 3,038 mg/kg (dermal, rabbit)

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane

LD50: >5,840 mg/kg (oral, rat)

LC50: > 25,200 mg/m³ (inhalation, rat, 4h)

LD50: >2,920 mg/kg (skin, rat)

Diphenylmethane diisocyanate, isomers and homologues

LD50: >2,000 mg/kg (oral, rat)

LC50: 0.493 mg/l (inhalation, rat, 4h)

Estimated acute toxicity of the mixture

ATE MIX oral (mg/kg): >2,000. Based on available data, the classification criteria are not met

ATE MIX dermal (mg/kg): >2,000. Based on available data, the classification criteria are not met

ATE MIX inhalation (mg/l/4h): >20. Based on available data, the classification criteria are not met

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The acute toxicity of the mixture (ATEmix) was calculated based on the relevant conversion factor set out in Table 3.1.2 of Annex I to the CLP Regulation, as amended.

Skin corrosion/irritation:

Causes skin irritation

Serious eye damage/eye irritation

Causes eye irritation

Respiratory or skin sensitisation

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled

Germ cell mutagenicity:

Based on available data, the classification criteria are not met

Carcinogenicity:

Suspected of causing cancer

Reproductive toxicity:

Suspected of damaging fertility or the unborn child

Specific target organ toxicity — single exposure:

May cause respiratory irritation

Specific target organ toxicity — repeated exposure:

May cause damage to organs through prolonged or repeated exposure

Aspiration hazard:

Based on available data, the classification criteria are not met

Information on likely routes of exposure

Skin contact: Causes skin irritation. In sensitised persons, a strong allergic reaction may occur even with very small amounts of the product

Eye contact: Causes eye irritation. Watering, redness, burning, irritation, blurred vision.

Inhalation: Inhalation of vapours at high concentration may cause fatigue, weakness, drowsiness, nausea, headache and dizziness, sore throat. Repeated contact with the vapours of the product may cause allergic reactions of the respiratory tract (swelling, hoarseness, a feeling of choking, coughing). May cause allergy or asthma symptoms or breathing difficulties if inhaled.

After ingestion: Possible irritation of the mouth, throat and oesophagus

11.2 Information on other hazards

Endocrine-disrupting properties:

The product has no effect on endocrine system function in accordance with the assessment criteria set out in Regulations (EC) No 1907/2006, (EU) 2017/2100, (EU) 2018/605

Other information:

None known

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity of the mixture

Harmful to aquatic life with long lasting effects

To minimise long-term global pollution, consider:

- Reducing the use of single-use products and packaging.
- Participation in recycling activities

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- Preventing the product from entering water, wastewater or soil

12.2 Persistence and degradability

No data available for the mixture

12.3 Bioaccumulative potential

No data available for the mixture

12.4 Mobility in soil

The product is insoluble in water. The mobility of the substance depends on its hydrophilic and hydrophobic properties as well as on the abiotic and biotic conditions of the soil, including its structure, climatic conditions, season of the year (in Poland, in a temperate variable climate), and soil organisms, mainly bacteria, fungi, algae and invertebrates.

12.5 Results of PBT and vPvB assessment

Does not meet the PBT and vPvB criteria

12.6 Endocrine-disrupting properties

The product does not contain constituents included in the list drawn up in accordance with Article 59(1) as having endocrine-disrupting properties, nor constituents identified as having endocrine-disrupting properties in accordance with the criteria set out in Regulation (EU) 2017/2100 or Regulation (EU) 2018/605, at a concentration equal to or greater than 0.1%.

12.7 Other adverse effects

The mixture is not classified as hazardous to the ozone layer. Other possible adverse effects of the individual mixture constituents on the environment should be considered (e.g. the ability to disrupt the hormonal balance, contribution to global warming). Releasing large quantities of the product into water causes a drop in pH.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product disposal:

Make sure containers are empty before disposal (risk of explosion). Do not pierce or burn, even when empty. Dispose of waste and residues in accordance with local authority requirements.

The waste code should be assigned at the place where the waste is generated

Proposed waste code

Waste code: 08 04 09* – Waste adhesives and sealants containing organic solvents or other hazardous substances.

Packaging disposal: Recovery (recycling) or disposal of packaging waste should be carried out in accordance with applicable regulations. Reusable packaging should be reused after cleaning.

Waste code: 15 01 10* – Packaging containing residues of hazardous substances or contaminated by hazardous substances. Only completely emptied packaging may be recycled.

Legal basis:

EU legislation: Directives of the European Parliament and of the Council: 2008/98/EC, as amended; 94/62/EC, as amended.

National legislation (Poland): Journal of Laws 2013, item 21, on waste, as amended; Journal of Laws 2013, item 888, on packaging and packaging waste management, as amended.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number

The product is not subject to the regulations on the carriage of dangerous goods contained in ADR (road transport), RID (rail transport), IMDG (sea transport), ICAO/IATA (air transport).

14.2 UN proper shipping name

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Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

The product does not pose a hazard to the environment in accordance with the criteria set out in the UN Model Regulations.

14.6 Special precautions for user

No special precautions.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Restrictions in accordance with REACH, Annex XVII

Mixture: No. 3, No. 75

Other regulations

1. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a 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.
2. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
3. 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.
4. Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, as amended.
5. Directive 94/62/EC of the European Parliament and of the Council of 20 December 1994 on packaging and packaging waste, as amended.
6. Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.
7. Commission Regulation (EU) No 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)
8. Regulation of the Polish Minister of Family, Labour and Social Policy of 12 June 2018 on maximum permissible concentrations and intensities of factors harmful to health in the workplace, Journal of Laws 2018.1286 of 3 July 2018
9. Act of 25 February 2011 on chemical substances and their mixtures (consolidated text, Journal of Laws 2022, item 1816).
10. Act of 13 June 2013 on packaging and packaging waste management (consolidated text, Journal of Laws 2020, item 1114, as amended).
11. Act of 14 December 2012 on waste (consolidated text, Journal of Laws 2022, item 699, as amended).
12. Act on the carriage of dangerous goods of 19 August 2011 (Journal of Laws 227, item 1367), consolidated text Journal of Laws 2020, items 154, 875
13. Government Declaration of 13 March 2023 on the entry into force of amendments to Annexes A and B to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), done at Geneva on 30 September 1957 (Journal of Laws 2023, item 891)

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15.2 Chemical safety assessment

The supplier has not carried out a chemical safety assessment. A safety report is not required for the mixture.

SECTION 16: OTHER INFORMATION

16.0 Other sources of data

IUCLID Data Bank (European Commission – European Chemicals Bureau).

ESIS – European Chemical Substances Information System (European Chemicals Bureau).

Sheet prepared by: Małgorzata Krenke [based on the supplier's safety data sheet], Feed Reach Consulting; e-mail: biuro@frc.com.pl

The above information has been prepared on the basis of currently available data characterising the product and the manufacturer's experience and knowledge in this field. The data contained in the Sheet should be treated solely as an aid for the safe handling of the product in transport, distribution, use and storage. The Sheet is not a certificate of the product's quality. The information contained in the Sheet relates only to the named product and may not be valid or sufficient when this product is used in combination with other materials or in different applications. The user of the product is obliged to comply with all applicable standards and regulations and bears responsibility arising from the improper use of the information contained in the Sheet or the improper application of the product.

16.1 Classification and procedures used to derive the classification of the mixture in accordance with Regulation (EC) 1272/2008 [CLP]

Class/category	H-code	Method
Skin Sens. 1	H317	calculation method
Aquatic Chronic 3	H412	calculation method
Repr. 2	H361	calculation method
Skin Irrit. 2	H315	calculation method
Eye Irrit. 2	H319	calculation method
Carc. 2	H351	calculation method
Resp. Sens. 1	H334	calculation method
STOT SE 3	H335	calculation method
STOT RE 2	H373	calculation method

16.2 H-statements (indicating the type of hazard) used in Sections 2 and 3 of the Safety Data Sheet

Code	Statement text
H315	Causes skin irritation;
Skin Irrit. 2	Skin irritation, Hazard Category 2
H317	May cause an allergic skin reaction.
Skin Sens. 1	Skin sensitisation, Hazard Category 1A
H411	Toxic to aquatic life with long lasting effects.
Aquatic Chronic 2	Hazardous to the aquatic environment, exposure Category 2.
H341	Suspected of causing genetic defects
Muta. 2	Germ cell mutagenicity, Hazard Category 2

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Code	Statement text
H319	Causes eye irritation.
Eye Irrit. 2	Eye irritation, Hazard Category 2
H373	May cause damage to organs through prolonged or repeated exposure.
STOT RE 2	Specific target organ toxicity – repeated exposure, Hazard Category 2
H332	Harmful if inhaled.
Acute Tox. 4	Acute toxicity, inhalation, Hazard Category 4
H335	May cause respiratory irritation.
STOT SE 3	Specific target organ toxicity – single exposure, Hazard Category 3.
H336	May cause drowsiness or dizziness.
STOT SE 3	Specific target organ toxicity – single exposure, Hazard Category 3.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Resp. Sens. 1	Respiratory sensitisation, Hazard Category 1
H225	Highly flammable liquid and vapour
Flam. Liq. 2	Flammable liquid, Hazard Category 2
H361	Suspected of damaging fertility or the unborn child.
Repr. 2	Reproductive toxicity, Hazard Category 2

16.3 Explanation of abbreviations and acronyms

Abbreviation	Meaning
CEN	European Committee for Standardization
C&L	Classification and Labelling
CLP	Regulation on Classification, Labelling and Packaging; Regulation (EC) No 1272/2008
CAS	Chemical Abstracts Service number
COM	European Commission
CMR	Carcinogenic, mutagenic or toxic to reproduction
CSA	Chemical Safety Assessment
CSR	Chemical Safety Report
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EEC
DSD	Dangerous Substances Directive 67/548/EEC
EC	European Commission
EC50	Median effective concentration
ECB	European Chemicals Bureau

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Abbreviation	Meaning
ECHA	European Chemicals Agency
EC	EINECS and ELINCS number (see also EINECS and ELINCS)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EN	European Standard
EU	European Union
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IC50	Concentration causing 50 percent inhibition of a given parameter
IUCLID	International Uniform Chemical Information Database
IUPAC	International Union of Pure and Applied Chemistry
LC50	Median lethal concentration
LD50	Median lethal dose
MSDS	Material Safety Data Sheet
PBT	Persistent, bioaccumulative and toxic substance
PEC	Predicted environmental concentration
PNEC(s)	Predicted no-effect concentration(s)
PPE	Personal protective equipment
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
SDS	Safety Data Sheet
SIEF	Substance Information Exchange Forum
STOT	Specific target organ toxicity
(STOT) RE	Repeated exposure
(STOT) SE	Single exposure
SVHC	Substance of Very High Concern
vPvB	Very persistent and very bioaccumulative [substance]
UN number	Material identification number under the ADR agreement.
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
MARPOL	International Convention for the Prevention of Pollution from Ships

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Abbreviation	Meaning
	(MARPOL)
EmS	Emergency Schedules for ships carrying dangerous goods
NDS	Occupational exposure limit — time-weighted average (TLV-TWA) (OEL-TWA) (PEL-TWA)
NDSch	Short-term exposure limit (TLV-STEL)
NDSP	Ceiling occupational exposure limit (TLV-C)

Training: Before starting work with the product, the user should familiarise themselves with occupational health and safety rules for handling chemicals, and in particular undergo appropriate job-specific training.

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