

2K PU FLEX - Part A

Creation date	26th February 2025	Version	1.0
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier**
Substance / mixture 2K PU FLEX - Part A
mixture
Number 1 90001
UFI UERE-GRF6-QR18-Q2GD
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use
Glue. For professional use only.
Main intended use
PC-ADH-8 Multi-component adhesives and sealants
Mixture 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 RETECH, s.r.o.
Address Vackova 1541/4, Praha 5 - Stodůlky, 155 00
Czech Republic
Identification number (CRN) 25018205
VAT Reg No CZ25018205
Phone +420327596428
E-mail info@retech.cz
Web address www.retech.com
- Competent person responsible for the safety data sheet**
Name RETECH, s.r.o.
E-mail info@retech.cz
- 1.4. Emergency telephone number**
European emergency number: 112

SECTION 2: Hazards identification

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

Eye Irrit. 2, H319

Most serious adverse effects on human health and the environment

Causes serious eye irritation.

- 2.2. Label elements**
Hazard pictogram

**Signal word**

Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash hands and exposed parts of the body thoroughly after handling.

P280 Wear eye protection/face protection.

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

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P337+P313

If eye irritation persists: Get medical advice/attention.

Label elements for packages not exceeding 125 ml**Hazard pictogram****Signal word**

Warning

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended. Does not contain any PMT or vPvM components.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Mixture of substances and additives specified below.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 102-60-3 EC: 203-041-4 Registration number: 01-2119552434-41	1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol	20-<50	Eye Irrit. 2, H319	
CAS: 64852-22-8	Glyceryl poly(oxypropylene)triamine	1-<3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412	

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**

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. In the event of issues, find medical advice.

If on skin

Remove contaminated clothes. And wash it before reuse. Wash the affected area with plenty of water, lukewarm if possible. Provide medical treatment if skin irritation persists.

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. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

If swallowed

Provide medical treatment. Rinse out the mouth with clean water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

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4.2. Most important symptoms and effects, both acute and delayed**If inhaled**

not available

If on skin

not available

If in eyes

Causes serious eye irritation.

If swallowed

not available

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

not available

More information**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Foam. Carbon dioxide. Powder. Water mist.

Unsuitable extinguishing media

No special requirements.

5.2. Special hazards arising from the substance or mixture

Do not breathe smoke.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water. Dispose of contaminated extinguishing water and remains after the fire in accordance with the official regulations.

EN137 - Respiratory protective devices — Self-contained open-circuit compressed air breathing apparatus with full face mask. EN 469 - Protective clothing for firefighters - Performance requirements for protective clothing for firefighting. EN 659+A1: - Protective gloves for firefighters.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Stop leak if safe to do so. Use personal protective equipment for work. Do not get in eyes, on skin, or on clothing. Follow the instructions in the Sections 7 and 8.

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

Ventilate the room. Large spills may be taken up with pump. 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. Assess the compatibility of the container you will be using for this product according to the information in Section 10.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Do not store in unlabeled containers. Store away from incompatible materials. See the Section 10.

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Content	Packaging type	Material of package
25 ml	cartridge	

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.

DNEL

1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol			
Workers / consumers	Route of exposure	Value	Effect
Consumers	Oral	2.5 mg/kg/24h	Chronic effects systemic
Consumers	Inhalation	8.7 mg/m ³	Chronic effects systemic
Consumers	Dermal	2.5 mg/kg/24h	Chronic effects systemic
Workers	Inhalation	29.4 mg/m ³	Chronic effects systemic
Workers	Dermal	4.2 mg/kg/24h	Chronic effects systemic

PNEC

1,1',1'',1'''-ethylenedinitrilotetrapropan-2-ol	
Route of exposure	Value
Freshwater environment	0.085 mg/l
Marine water	0.0085 mg/l
Freshwater sediment	0.193 mg/kg
Sea sediments	0.0193 mg/kg
Seawater (intermittent release)	1.51 mg/l
Microorganisms in sewage treatment	70 mg/l
Soil (agricultural)	0.0183 mg/kg

8.2. Exposure controls

Technical precautions and appropriate working practices take precedence over personal protective equipment. 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. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Personal protective equipment must bear the CE marking, verifying its conformity with the applicable regulations. Ensure workplace is equipped with a safety shower and eye wash station.

Eye/face protection

Tightly sealed goggles. EN166 - Personal Eye Protection Standard.

Skin protection

Hand protection: Protective gloves resistant to the product. Category III. EN ISO 374-1. Material of gloves: Nitrile rubber, NBR. Penetration time of glove material: 240 min. Recommended thickness of the material: 0.5 mm. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer.

Other protection: Wear category I professional long-sleeved overalls and safety footwear (see Regulation (EU) 2016/425 and standard EN ISO 20344). Contaminated skin should be washed thoroughly.

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Respiratory protection

Use a mask with filter when the exposition limits of the substances are exceeded or at the place with insufficient ventilation. Filter A. EN143 - Respiratory protective devices - Gas filter(s) and combined filter(s). In the event of gases and vapours of a different nature and/or particle-containing gases or vapours (aerosols, smoke, mist, etc.), combination filters must be provided. The protection provided by masks is in any case limited.

Use insulating breathing apparatus in case of an accident, fire or high concentration. EN137 - Respiratory protective devices — Self-contained open-circuit compressed air breathing apparatus with full face mask. EN138 - Respiratory protective devices - Specification for fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece assembly. EN 529 - Respiratory protective devices. Recommendations for selection, use, care and maintenance. Guidance document.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	liquid
Colour	colourless
Odour	characteristic
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	>200 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	182 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	non-soluble (in water)
Kinematic viscosity	data not available
Viscosity	2000 mPa.s
Solubility in water	insoluble
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	0.1 Pa at 20 °C
Density and/or relative density	
Density	1.02 g/cm ³
Relative vapour density	data not available
Particle characteristics	data not available
Form	liquid
data not available	

9.2. Other information

Evaporation rate	data not available
Content of organic solvents (VOC)	0

SECTION 10: Stability and reactivity**10.1. Reactivity**

When used in the standard way, there is not any dangerous reaction with other substances.

10.2. Chemical stability

The product is stable under normal conditions.

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10.3. Possibility of hazardous reactions

When used in the standard way, there is not any dangerous reaction with other substances.

10.4. Conditions to avoid

No special requirements. Follow the usual measures for health protection at work.

10.5. Incompatible materials

not available

10.6. Hazardous decomposition products

not available

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. In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Acute toxicity

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

Glyceryl poly(oxypropylene)triamine					
Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD ₅₀	2690 mg/kg		Rat	
Dermal	LD ₅₀	12500 mg/kg		Rabbit	

Skin corrosion/irritation

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Serious eye damage/irritation

Causes serious eye irritation. Data for the components of the mixture are not available.

Respiratory or skin sensitisation

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Germ cell mutagenicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Carcinogenicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Reproductive toxicity

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Toxicity for specific target organ - single exposure

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

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Toxicity for specific target organ - repeated exposure

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

Aspiration hazard

No data are available for either the mixture or the components. Based on the available data, the criteria for classification of the mixture are not met.

11.2. Information on other hazards**Endocrine disrupting properties**

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any components that may cause endocrine disruption for humans.

Other information

not available

SECTION 12: Ecological information**12.1. Toxicity**

Data for the mixture are not available. Based on the available data, the criteria for classification of the mixture are not met.

Acute toxicity

Glyceryl poly(oxypropylene)triamine				
Parameter	Value	Exposure time	Species	Environment
LC ₅₀	68 mg/l		Fish	

More information

Follow proper work practices, do not litter. Notify the competent authorities if the substance has entered watercourses or if soil or vegetation contamination occurred.

12.2. Persistence and degradability

No data are available for either the mixture or the components.

12.3. Bioaccumulative potential

No data are available for either the mixture or the components.

12.4. Mobility in soil

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any PMT or vPvM components.

12.5. Results of PBT and vPvB assessment

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any PBT or vPvB components.

12.6. Endocrine disrupting properties

Based on the available data, the criteria for classification of the mixture are not met. Does not contain any components that may cause endocrine disruption in the environment.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

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. Reuse if possible. Dispose unused product as hazardous waste.

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.

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Waste type code

08 04 09* waste adhesives and sealants containing organic solvents or other hazardous substances

Packaging waste type code

15 01 10* packaging containing residues of or contaminated by hazardous substances

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information**14.1. UN number or ID number**

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

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

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.

More information

Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended
Dibutylbis(dodecylthio)stannane (CAS: 1185-81-5, Registration number: 01-2119841260-50-0000)
Restriction: 20.

SECTION 16: Other information**A list of standard risk phrases used in the safety data sheet**

H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

P264	Wash hands and exposed parts of the body thoroughly after handling.
P280	Wear eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.

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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
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
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
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
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
log Kow	Octanol-water partition coefficient
OEL	Occupational Exposure Limits
PBT	Persistent, bioaccumulative and toxic
PMT	Persistent, mobile and toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
Skin Irrit.	Skin irritation
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
vPvM	Very persistent and very mobile

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

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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.

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.