

2K PU FLEX - Part B

Creation date	26th February 2025	Version	1.0
Revision date			

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Substance / mixture	2K PU FLEX - Part B
Number	mixture
UFI	1 90001
	KDHE-0JM1-2NJQ-T7TH

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.

Skin Irrit. 2, H315
Skin Sens. 1A, H317
Eye Irrit. 2, H319
Resp. Sens. 1, H334
STOT SE 3, H335
Carc. 2, H351
STOT RE 2, H373 (inhalation)

Most serious adverse effects on human health and the environment

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure if inhaled.

2.2. Label elements**Hazard pictogram****Signal word**

Danger

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Hazardous substances

4,4'-Methylenediphenyl diisocyanate, oligomers

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary statements

P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	In case of inadequate ventilation wear respiratory protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Supplemental information

EUH204	Contains isocyanates. May produce an allergic reaction. Restricted to professional users. As from 24 August 2023 adequate training is required before industrial or professional use.
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Label elements for packages not exceeding 125 ml**Hazard pictogram****Signal word**

Danger

Hazardous substances

4,4'-Methylenediphenyl diisocyanate, oligomers

Hazard statements

H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351	Suspected of causing cancer.

Precautionary statements

P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	In case of inadequate ventilation wear respiratory protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.

Supplemental information

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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: 25686-28-6 EC: 500-040-3 Registration number: 01-2119457013-49	4,4'-Methylenediphenyl diisocyanate, oligomers	50-<100	Skin Irrit. 2, H315 Skin Sens. 1A, H317 Eye Irrit. 2, H319 Acute Tox. 4, H332 Resp. Sens. 1, H334 STOT SE 3, H335 Carc. 2, H351 STOT RE 2, H373 (inhalation) EUH204 Specific concentration limit: Skin Irrit. 2, H315: C ≥ 5 % Eye Irrit. 2, H319: C ≥ 5 % Resp. Sens. 1, H334: C ≥ 0.1 % STOT SE 3, H335: C ≥ 5 % ATE Inhalation (vapor) = 11 mg/l	1, 2, 3, 4

Notes

- Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.*
- Note 2: The concentration of isocyanate stated is the percentage by weight of the free monomer calculated with reference to the total weight of the mixture.*
- The use of the substance is restricted by Annex XVII of REACH Regulation*
- Substance of unknown or variable composition, complex reaction products or biological materials - UVCB.*

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. 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. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

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.

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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. DO NOT INDUCE VOMITING! Never give anything by mouth to an unconscious person.

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

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure if inhaled.

If on skin

Causes skin irritation. May cause an allergic skin reaction.

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.

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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.

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

4,4'-Methylenediphenyl diisocyanate, oligomers			
Workers / consumers	Route of exposure	Value	Effect
Consumers	Oral	20 mg/kg bw/day	Acute effects systemic
Consumers	Inhalation	0.05 mg/m ³	Acute effects local
Consumers	Inhalation	0.025 mg/m ³	Chronic effects local
Consumers	Inhalation	0.025 mg/m ³	Chronic effects systemic
Consumers	Dermal	17.2 mg/cm ²	Acute effects local
Consumers	Dermal	25 mg/kg bw/day	Acute effects systemic
Workers	Inhalation	0.1 mg/m ³	Acute effects local
Workers	Inhalation	0.1 mg/m ³	Acute effects systemic
Workers	Inhalation	0.05 mg/m ³	Chronic effects local
Workers	Inhalation	0.05 mg/m ³	Chronic effects systemic
Workers	Dermal	28.7 mg/cm ²	Acute effects local
Workers	Dermal	50 mg/kg bw/day	Acute effects systemic

PNEC

4,4'-Methylenediphenyl diisocyanate, oligomers	
Route of exposure	Value
Freshwater environment	1 mg/l
Marine water	0.1 mg/l
Microorganisms in sewage treatment	1 mg/l
Soil (agricultural)	1 mg/kg

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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. Exposure levels should be kept as low as possible to avoid dangerous build-up of the substance in the body. Work with personal protective equipment to ensure maximum protection (e.g. reducing the time to replace it).

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 II professional long-sleeved overalls and safety footwear (see Regulation (EU) 2016/425 and standard EN ISO 20344). Contaminated skin should be washed thoroughly.

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	>300 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	205 °C
Auto-ignition temperature	>600 °C
Decomposition temperature	data not available
pH	non-soluble (in water)
Kinematic viscosity	data not available
Viscosity	5000 mPa.s
Solubility in water	insoluble
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available

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Vapour pressure	0.01 Pa at 20 °C
Density and/or relative density	
Density	1.16 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.

10.3. Possibility of hazardous reactions

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

4,4'-Methylenediphenyl diisocyanate, oligomers
 Reacts with acids. Alcohols. Amines. Water.

10.4. Conditions to avoid

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

4,4'-Methylenediphenyl diisocyanate, oligomers
 Heat. Moisture.

10.5. Incompatible materials

4,4'-Methylenediphenyl diisocyanate, oligomers
 Acids. Bases. Amines. Metals. Water.

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

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

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

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Route of exposure	Parameter	Value	Exposure time	Species	Sex
Inhalation (vapor)	ATE	>20 mg/l			

4,4'-Methylenediphenyl diisocyanate, oligomers					
Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD ₅₀	>5000 mg/kg			
Dermal	LD ₅₀	>9400 mg/kg			
Inhalation (vapor)	LC ₅₀	0.49 mg/l	4 hours		
Inhalation (vapor)	ATE	11 mg/l			

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Skin corrosion/irritation

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

Serious eye damage/irritation

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

Respiratory or skin sensitisation

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Data for the components of the mixture are not available.

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

Suspected of causing cancer. Data for the components of the mixture are not available.

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

May cause respiratory irritation. Data for the components of the mixture are not available.

Toxicity for specific target organ - repeated exposure

May cause damage to organs through prolonged or repeated exposure if inhaled. Data for the components of the mixture are not available.

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**

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.

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.

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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.

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).

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

4,4'-Methylenediphenyl diisocyanate, oligomers

Restriction	Conditions of restriction
56	<p>1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtures in concentrations equal to or greater than 0,1 % by weight of MDI for supply to the general public, unless suppliers shall ensure before the placing on the market that the packaging:</p> <p>(a) contains protective gloves which comply with the requirements of Council Directive 89/686/EEC (*****);</p> <p>(b) is marked visibly, legibly and indelibly as follows, and without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures:</p> <p>“— Persons already sensitised to diisocyanates may develop allergic reactions when using this product.</p> <p>— Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.</p> <p>— This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.”</p> <p>2. By way of derogation, paragraph 1(a) shall not apply to hot melt adhesives.</p>
74	<p>1. Shall not be used as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 August 2023, unless:</p> <p>(a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or</p> <p>(b) the employer or self-employed ensures that industrial or professional user(s) have successfully completed training on the safe use of diisocyanates prior to the use of the substance(s) or mixture(s).</p> <p>2. Shall not be placed on the market as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 February 2022, unless:</p> <p>(a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or</p> <p>(b) the supplier ensures that the recipient of the substance(s) or mixture(s) is provided with information on the requirements referred to in point (b) of paragraph 1 and the following statement is placed on the packaging, in a manner that is visibly distinct from the rest of the label information: “As from 24 August 2023 adequate training is required before industrial or professional use”.</p> <p>3. For the purpose of this entry “industrial and professional user(s)” means any worker or self-employed worker handling diisocyanates on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) or supervising these tasks.</p> <p>4. The training referred to in point (b) of paragraph 1 shall include the instructions for the control of dermal and inhalation exposure to diisocyanates at the workplace without prejudice to any national occupational exposure limit value or other appropriate risk management measures at national level. Such training shall be conducted by an expert on occupational safety and health with competence acquired by relevant vocational training. That training shall cover as a minimum:</p> <p>(a) the training elements in point (a) of paragraph 5 for all industrial and professional use(s).</p> <p>(b) the training elements in points (a) and (b) of paragraph 5 for the following uses:</p> <ul style="list-style-type: none"> — handling open mixtures at ambient temperature (including foam tunnels); — spraying in a ventilated booth; — application by roller; — application by brush; — application by dipping and pouring; — mechanical post treatment (e.g. cutting) of not fully cured articles which are not warm anymore; — cleaning and waste; — any other uses with similar exposure through the dermal and/or inhalation route; <p>(c) the training elements in points (a), (b) and (c) of paragraph 5 for the following uses:</p> <ul style="list-style-type: none"> — handling incompletely cured articles (e.g. freshly cured, still warm); — foundry applications; — maintenance and repair that needs access to equipment;

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4,4'-Methylenediphenyl diisocyanate, oligomers

Restriction	Conditions of restriction
	<ul style="list-style-type: none"> – open handling of warm or hot formulations (> 45 °C); – spraying in open air, with limited or only natural ventilation (includes large industry working halls) and spraying with high energy (e.g. foams, elastomers); – and any other uses with similar exposure through the dermal and/or inhalation route. <p>5. Training elements:</p> <p>(a) general training, including on-line training, on:</p> <ul style="list-style-type: none"> – chemistry of diisocyanates; – toxicity hazards (including acute toxicity); – exposure to diisocyanates; – occupational exposure limit values; – how sensitisation can develop; – odour as indication of hazard; – importance of volatility for risk; – viscosity, temperature, and molecular weight of diisocyanates; – personal hygiene; – personal protective equipment needed, including practical instructions for its correct use and its limitations; – risk of dermal contact and inhalation exposure; – risk in relation to application process used; – skin and inhalation protection scheme; – ventilation; – cleaning, leakages, maintenance; – discarding empty packaging; – protection of bystanders; – identification of critical handling stages; – specific national code systems (if applicable); – behaviour-based safety; – certification or documented proof that training has been successfully completed <p>(b) intermediate level training, including on-line training, on:</p> <ul style="list-style-type: none"> – additional behaviour-based aspects; – maintenance; – management of change; – evaluation of existing safety instructions; – risk in relation to application process used; – certification or documented proof that training has been successfully completed <p>(c) advanced training, including on-line training, on:</p> <ul style="list-style-type: none"> – any additional certification needed for the specific uses covered; – spraying outside a spraying booth; – open handling of hot or warm formulations (> 45 °C); – certification or documented proof that training has been successfully completed <p>6. The training shall comply with the provisions set by the Member State in which the industrial or professional user(s) operate. Member States may implement or continue to apply their own national requirements for the use of the substance(s) or mixture(s), as long as the minimum requirements set out in paragraphs 4 and 5 are met.</p> <p>7. The supplier referred to in point (b) of paragraph 2 shall ensure that the recipient is provided with training material and courses pursuant to paragraphs 4 and 5 in the official language(s) of the Member State(s) where the substance(s) or mixture(s) are supplied. The training shall take into consideration the specificity of the products supplied, including composition, packaging, and design.</p> <p>8. The employer or self-employed shall document the successful completion of the training referred to in paragraphs 4 and 5. The training shall be renewed at least every five years.</p> <p>9. Member States shall include in their reports pursuant to Article 117(1) the following information:</p> <p>(a) any established training requirements and other risk management measures related to the industrial and professional uses of diisocyanates foreseen in national law;</p> <p>(b) the number of cases of reported and recognised occupational asthma and occupational respiratory and dermal diseases in relation to diisocyanates;</p> <p>(c) national exposure limits for diisocyanates, if there are any;</p>

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4,4'-Methylenediphenyl diisocyanate, oligomers

Restriction	Conditions of restriction
	(d) information about enforcement activities related to this restriction. 10. This restriction shall apply without prejudice to other Union legislation on the protection of safety and health of workers at the workplace.

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**

EUH204	Contains isocyanates. May produce an allergic reaction.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.

Guidelines for safe handling used in the safety data sheet

P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	In case of inadequate ventilation wear respiratory protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

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

Acute Tox.	Acute toxicity
ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
Carc.	Carcinogenicity
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 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

2K PU FLEX - Part B

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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 K _{ow}	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
Resp. Sens.	Respiratory sensitization
RID	Agreement on the transport of dangerous goods by rail
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
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

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.