

2K-PUR tvrdidlo 5:1

Creation date 05th December 2024
Revision date Version 2.0

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

- 1.1. Product identifier** 2K-PUR tvrdidlo 5:1
Substance / mixture mixture
Number 15
UFI H910-D0VC-200K-RP8S
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use

Main intended use

PC-COL-1 Dyes

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

Manufacturer

Name or trade name Barvy laky Lanškroun s.r.o.
Address M.Alše 372, Lanškroun, 56301
Czech Republic
Identification number (CRN) 25970798
VAT Reg No CZ25970798
Phone 775234735
E-mail vyroba@jap-lanskroun.cz

Competent person responsible for the safety data sheet

Name Barvy laky Lanškroun s.r.o.
E-mail vyroba@jap-lanskroun.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.

Flam. Liq. 3, H226
Skin Sens. 1, H317

Most serious adverse physico-chemical effects

Flammable liquid and vapour.

Most serious adverse effects on human health and the environment

Harmful if inhaled. May cause an allergic skin reaction. May cause respiratory irritation. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram



Signal word

Warning

Hazardous substances

Hexamethylene diisocyanate, oligomers
hexamethylene-di-isocyanate

Hazard statements

H226 Flammable liquid and vapour.
H317 May cause an allergic skin reaction.

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Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapours.
P280 Wear protective gloves.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use powder extinguisher/sand/carbon dioxide to extinguish.

Supplemental information

EUH204 Contains isocyanates. May produce an allergic reaction.

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.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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: 28182-81-2 EC: 500-060-2	Hexamethylene diisocyanate, oligomers	85,5	Skin Sens. 1, H317	
Index: 607-025-00-1 CAS: 123-86-4 EC: 204-658-1	n-butyl acetate	5,6	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	4
Index: 601-022-00-9 CAS: 1330-20-7 EC: 215-535-7	xylene	5,6	Flam. Liq. 3, H226 Acute Tox. 4, H312+H332 Skin Irrit. 2, H315	1, 4
Index: 649-356-00-4 CAS: 64742-95-6 EC: 265-199-0	Solvent naphtha (petroleum), light arom.	3,3	Asp. Tox. 1, H304	3, 6
Index: 615-011-00-1 CAS: 822-06-0 EC: 212-485-8	hexamethylene-di-isocyanate	0,08	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Acute Tox. 3, H331 Resp. Sens. 1, H334 STOT SE 3, H335 Specific concentration limit: Resp. Sens. 1, H334: C ≥ 0.5 % Skin Sens. 1, H317: C ≥ 0.5 %	2, 5

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.
- Note P: The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 shall apply.
- A substance for which exposure limits are set.
- The use of the substance is restricted by Annex XVII of REACH Regulation
- Fulfilled Note P

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

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SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

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

If on skin

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

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.

If swallowed

Provide medical treatment.

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

If inhaled

Cough, headache. May cause respiratory irritation. May cause drowsiness or dizziness.

If on skin

May cause an allergic skin reaction.

If in eyes

Not expected.

If swallowed

Irritation, nausea.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. Flammable liquid and vapour. Remove all ignition sources. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

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6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Use non-sparking tools. Use of antistatic clothes and footwear is recommended. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes. No smoking. Contaminated work clothing should not be allowed out of the workplace. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take action to prevent static discharges. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight. Store locked up. Keep container tightly closed. Keep cool.

Content	Packaging type	Material of package
1 kg	can / tin	FE
5 kg	can / tin	FE

The specific requirements or rules relating to the substance/mixture

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

European Union

Commission Directive (EU) 2019/1831

Substance name (component)	Type	Value	Note
n-butyl acetate (CAS: 123-86-4)	OEL 8 hours	241 mg/m ³	
	OEL 8 hours	50 ppm	
	OEL 15 minutes	723 mg/m ³	
	OEL 15 minutes	150 ppm	

European Union

Commission Directive 2000/39/EC

Substance name (component)	Type	Value	Note
xylene (CAS: 1330-20-7)	OEL 8 hours	221 mg/m ³	Skin
	OEL 8 hours	50 ppm	
	OEL 15 minutes	442 mg/m ³	
	OEL 15 minutes	100 ppm	

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8.2. Exposure controls

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

Eye/face protection

It is not needed.

Skin protection

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

Respiratory protection

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

Thermal hazard

Not available.

Environmental exposure controls

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	po organických rozpouštědlech
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	data not available
Lower and upper explosion limit	
bottom	1.2-1.7 %
upper	7.5-7.6 %
Flash point	55 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	non-soluble (in water)
Kinematic viscosity	data not available
Solubility in water	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	0.8-1 g/cm ³
Relative vapour density	data not available
Particle characteristics	data not available

9.2. Other information

VOC 0,32 kg/kg výrobku VOC dle 2004/45/ES

SECTION 10: Stability and reactivity

10.1. Reactivity

not available

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

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10.4. Conditions to avoid

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

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

Acute toxicity

Harmful if inhaled. Data for the components of the mixture are not available.

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

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.

Respiratory or skin sensitisation

May cause an allergic skin reaction. 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

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

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

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

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.

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SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects. Data for the components of the mixture are not available.

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

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

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

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.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Waste management legislation

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

Waste type code

08 01 11* waste paint and varnish 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

UN 1263

14.2. UN proper shipping name

PAINT

14.3. Transport hazard class(es)

3 Flammable liquids

14.4. Packing group

I

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

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Additional information

Hazard identification No. **33**
UN number **1263**
Classification code F1
Safety signs 3



Tunnel restriction code (D/E)

Air transport - ICAO/IATA

Packaging instructions passenger 351
Cargo packaging instructions 361

Marine transport - IMDG

EmS (emergency plan) F-E, S-E
MFAG 310

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).

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

hexamethylene-di-isocyanate

Restriction	Conditions of restriction
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> <p>– handling open mixtures at ambient temperature (including foam tunnels);</p>

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hexamethylene-di-isocyanate

Restriction	Conditions of restriction
	<ul style="list-style-type: none"> – 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; – 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>

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

15.2. Chemical safety assessment

not available

More information

1. Nesmí se používat jako samotné látky, jako složky jiných látek nebo ve směsích pro průmyslové a profesionální použití po dni 24.srpna 2023, pokud: a) koncentrace diisokyanátů jednotlivě a dohromady není nižší než 0,1 % hmotnostních dílů b) zaměstnavatel nebo osoba samostatně výdělečně činná nezajistí, aby průmysloví nebo profesionální uživatelé před použitím látky nebo směsi úspěšně absolvovali odbornou přípravu o bezpečném používání diisokyanátů. 2. Nesmí se uvádět na trh jako samotné látky, jako složky jiných látek nebo ve směsích pro průmyslové a profesionální použití po dni 24.února 2022, pokud: a) koncentrace diisokyanátů jednotlivě a dohromady není nižší než 0,1 % hmotnostních nebo b) dodavatel nezajistí, aby příjemce látky (látek) nebo směsi (směsí) dostal informace o požadavcích uvedených v bodě 1 písm.b), a na obalu není uvedeno následující prohlášení způsobem, který se viditelně odlišuje od ostatních informací na štítku: „Ode dne 24.srpna 2023 se pro průmyslové nebo profesionální použití vyžaduje odpovídající odborná příprava.“ 3. Pro účely této položky se pojmem „průmysloví a profesionální uživatelé“ rozumí jakýkoli pracovník či osoba samostatně výdělečně činná manipulující s diisokyanáty samostatně, jakožto složkami jiných látek nebo ve směsích pro průmyslové a profesionální použití nebo dohlížející na tyto úkoly. 4. Odborná příprava uvedená v bodě 1 písm.b) zahrnuje pokyny ke kontrole dermální a inhalační expozice diisokyanátům na pracovišti, aniž je dotčena jakákoli vnitrostátní limitní hodnota expozice na pracovišti nebo jiná vhodná opatření k řízení rizik na vnitrostátní úrovni. Tuto odbornou přípravu provádí odborník na bezpečnost a ochranu zdraví při práci s odbornou způsobilostí získanou příslušným odborným vzděláním. Tato odborná příprava musí zahrnovat alespoň: a) prvky odborné přípravy uvedené v bodě 5 písm.a) pro veškeré průmyslové a profesionální použití; b) prvky odborné přípravy uvedené v bodě 5 písm.a) a b) pro následující použití: — manipulace s otevřenými směsmi při teplotě okolí (včetně pěnových tunelů), — stříkání ve větrané kabině, — aplikace válečkem, — aplikace štětcem, — aplikace máčením a poléváním, — mechanické následné zpracování (např.řezání) ne zcela ošetřených vychladlých předmětů, — čištění a odpad, — jakékoli jiné použití s podobnou expozicí dermální a/nebo inhalační cestou; c) prvky odborné přípravy uvedené v bodě 5 písm.a), b) a c) pro následující použití: — nakládání s neúplně ošetřenými předměty (např.čerstvě ošetřenými, ještě teplými), — aplikace ve slévárnství, — údržba a opravy, které vyžadují přístup k vybavení, — otevřené zpracování teplých nebo horkých přípravků (> 45 °C), — stříkání v otevřeném prostoru, s omezenou nebo pouze přírodní ventilací (zahrnuje velképrůmyslové haly), a vysoce energetické stříkání (např.pěny, elastomery) — a jakékoli jiné použití s podobnou expozicí dermální a/nebo inhalační cestou. 5. Prvky odborné přípravy: a) obecná odborná příprava, včetně školení on-line, týkající se:

SECTION 16: Other information

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

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H312+H332	Harmful in contact with skin or if inhaled.

Guidelines for safe handling used in the safety data sheet

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapours.
P280	Wear protective gloves.

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P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P370+P378 In case of fire: Use powder extinguisher/sand/carbon dioxide to extinguish.

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

EUH204 Contains isocyanates. May produce an allergic reaction.
 EUH066 Repeated exposure may cause skin dryness or cracking.

Other important information about human health protection

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

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
log Kow	Octanol-water partition coefficient
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Resp. Sens.	Respiratory sensitization
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STOT SE	Specific target organ toxicity - single exposure

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

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Information about data sources used to compile the Safety Data Sheet

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

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

The version 2.0 replaces the SDS version from 02 February 2024. Changes were made in sections 2 and 16.

More information

Classification procedure - calculation method.

Statement

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