



HE ULTRA TEX 2K HARDENER

Code : 5004-001062



Version: 2

Revision: 27/03/2023

Previous revision: 04/11/2022

Date of printing: 27/03/2023

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

- 1.1** PRODUCT IDENTIFIER:
HE ULTRA TEX 2K HARDENER
Code : 5004-001062 (CAS: 28182-81-2 EC: 931-274-8) UFI: 61XE-KHJF-SC0W-DNQG
REACH REGISTER:
Register name:
HDI oligomers, isocyanurate
Register number:
01-2119485796-17
- 1.2** RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST:
Intended uses (main technical functions): ☒ Industrial ☒ Professional ☐ Consumers
Catalyst.
Sectors of use (use as such or as an ingredient in mixtures):
Industrial manufacturing (SU3). Industrial.
Manufacture of bulk, large scale chemicals (SU8). Industrial.
Formulation (mixing) of preparations and/or re-packaging (SU10). Industrial, Professional.
Manufacture of plastic products (SU12). Industrial, Professional.
Manufacture of other non-metallic mineral products (SU13). Industrial, Professional.
Building and construction work (SU19). Industrial, Professional, Consumers.
Professional uses (SU22). Professional.
Use in manufacture, formulation or application processes (relevant uses):
Industrial use, Industrial.
Professional use, Professional.
Manufacture of the substance, Industrial.
Use as an intermediate, Industrial.
Formulation, Industrial, Professional.
Types of PCN use:
Chemical products: uncategorised.
Uses advised against:
For professional or industrial use only. Not recommended for use in any consumer products. This product is not recommended for any use or sector of use (industrial, professional or consumer) other than those previously listed as 'Intended or identified uses'. Not suitable for DIY use. If your use is not covered, please contact the supplier of this Safety Data Sheet.
Restrictions on manufacture, placing on market and use, according to Annex XVII of Regulation (EC) No. 1907/2006:
Not restricted.
- 1.3** DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:
CAR REPAIR SYSTEM S.A.
Pol.Ind. 2 de Octubre, c/ José Muñoz 6 - 18320 Santa Fe - Granada ESPAÑA
Phone number: (+34) 95 8431792 - www.carrepairsystem.eu
- E-mail address of the person responsible for the Safety Data Sheet:
info@carrepairsystem.eu
- 1.4** EMERGENCY TELEPHONE NUMBER:
(+34) 95 8431792 L-J 8:30-14 / 15-18 h. V 8:30-14:30 h.

SECTION 2 : HAZARDS IDENTIFICATION

- 2.1** CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:
Classification in accordance with Regulation (EU) No. 1272/2008~2021/849 (CLP):
DANGER:Flam. Liq. 3:H226|Skin Irrit. 2:H315|Eye Irrit. 2:H319|Skin Sens. 1:H317|STOT SE (irrit.) 3:H335|STOT SE (narcosis) 3:H336|STOT RE 2:H373|Asp. Tox. 1:H304|EUH014|EUH066
- | Danger class | Classification of the substance | Cat. | Routes of exposure | Target organs | Effects |
|--------------------------------|--|--|--|---|--|
| Physicochemical: | Flam. Liq. 3:H226
EUH014:EUH014 | Cat.3
- | -
- | -
- | -
- |
| Human health: | Skin Irrit. 2:H315
Eye Irrit. 2:H319
Skin Sens. 1:H317
STOT SE (irrit.) 3:H335
STOT SE (narcosis) 3:H336
STOT RE 2:H373
Asp. Tox. 1:H304
EUH066 | Cat.2
Cat.2
Cat.1
Cat.3
Cat.3
Cat.2
Cat.1
- | Skin
Eyes
Skin
Inhalation
Inhalation
Inhalation
Ingestion+Aspiration
Skin | Skin
Eyes
Skin
Respiratory tract
CNS
Systemic
Lungs
Skin | Irritation
Irritation
Allergy
Irritation
Narcosis
Damage
Dead
Dryness, Cracking |
| Environment:
Not classified | | | | | |
- Full text of hazard statements mentioned is indicated in section 16.
- 2.2** LABEL ELEMENTS:
- This product is labelled with the signal word DANGER in accordance with Regulation (EU) No. 1272/2008~2021/849 (CLP)

- Hazard statements:



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	<p>H226 Flammable liquid and vapour.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure if inhaled.</p> <p>H304 May be fatal if swallowed and enters airways.</p> <p>H319 Causes serious eye irritation.</p> <p>H335 May cause respiratory irritation.</p> <p>H315 Causes skin irritation.</p> <p>H336 May cause drowsiness or dizziness.</p> <p>H317 May cause an allergic skin reaction.</p> <p>EUH014 Reacts violently with water.</p> <p><u>- Precautionary statements:</u></p> <p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P337+P313 If eye irritation persists: Get medical advice/attention.</p> <p>P280 Wear protective gloves, clothing and eye protection. In case of inadequate ventilation wear respiratory protection.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P301+P310-P330+P331 IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.</p> <p>P303+P361+P353-P352-P312 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash with plenty of water and soap.. Call a POISON CENTER or doctor if you feel unwell.</p> <p>P304+P340-P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.</p> <p>P305+P351+P338-P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.</p> <p>P501 Dispose of contents/container in accordance with local regulations.</p> <p><u>- Supplementary statements:</u></p> <p>None</p> <p><u>- Substances that contribute to classification:</u></p> <p>HDI oligomers, isocyanurate (EC No. 931-274-8)</p> <p>n-butyl acetate (EC No. 204-658-1)</p> <p>Reaction mass of ethylbenzene and xylene (EC No. 905-588-0)</p> <p>2-methoxy-1-methylethyl acetate (EC No. 203-603-9)</p> <p><u>Other sensitizing components:</u></p> <p>Tosil-isocyanate</p>
2.3	<p><u>OTHER HAZARDS:</u></p> <p>Hazards which do not result in classification but which may contribute to the overall hazards of the substance:</p> <p><u>- Other physicochemical hazards:</u></p> <p>Vapours may form with air a mixture potentially flammable or explosive.</p> <p><u>- Other adverse human health effects:</u></p> <p>People with hypersensitive respiratory tract (by instance, asthma or chronical bronchitis) should not handle this product.</p> <p><u>- Other negative environmental effects:</u></p> <p>Do not fulfil the PBT/vPvB criteria.</p> <p><u>Endocrine disrupting properties:</u></p> <p>This product does not contain substances with endocrine disrupting properties identified or under evaluation.</p>



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	Skin: 	Skin contact causes redness. Prolonged contact may cause skin dryness.	Remove immediately contaminated clothing. Throw away clothing should it be highly contaminated. Wash thoroughly the affected area with plenty of cold or lukewarm water and remove or neutralize the substance with polyethylenglycol 300 or vegetable oil. Do not use solvents or thinners. Supply medical attention.
	Eyes: 	Contact with the eyes produces redness, pain and blurred vision.	Remove contact lenses. Rinse eyes copiously by irrigation with plenty of clean, fresh water for at least 15 minutes, holding the eyelids apart, until the irritation is reduced. Call a physician immediately.
	Ingestion: 	If swallowed, may cause irritation of the mouth, throat and oesophagus.	Call a physician. Do not induce vomiting, unless directed to do so by medical personnel. Should vomiting occur spontaneously, keep free respiratory tract. Keep the patient at rest.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

The main symptoms and effects are indicated in sections 4.1 and 11.1

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:Notes to physician:

Treatment should be directed at the control of symptoms and the clinical condition of the patient.

Antidotes and contraindications:

In the case of a pneumonia by chemical agents, must be considered a therapy with antibiotics and corticosteroids.

SECTION 5: FIREFIGHTING MEASURES**5.1 EXTINGUISHING MEDIA:**

Extinguishing powder or CO₂. In the case of more important fires, also alcohol resistant foam and water spray/mist. The use of alcohol resistant foams (ATC-type) are preferred. You can also use the general purpose synthetic foams (including AFFF) or common protein foams, but they will be less effective. Do not use for extinguishing: direct water jet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

As consequence of combustion or thermal decomposition, hazardous products may be produced.

5.3 ADVICE FOR FIREFIGHTERS:Special protective equipment:

It is necessary wear respiratory protection with independent air supply. If the fire-proof protective equipment is not available or is not being used, combat fire from a sheltered position or from a safe distance.

Other recommendations:

Cool with water the tanks, cisterns or containers close to sources of heat or fire. Bear in mind the direction of the wind. Do not direct a constant jet of water or foam at burning sources of heat, as this could produce foam and increase the intensity of the fire. Do not allow fire-fighting residue to enter drains, sewers or water courses.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 **PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:**
Restrict the access to the area of the spill. Eliminate possible sources of ignition and when appropriate, ventilate the area. Avoid direct contact with this product. Avoid contact with skin and eyes. The floor may become slippery.
- 6.2 **ENVIRONMENTAL PRECAUTIONS:**
Avoid contamination of drains, surface or subterranean water and soil. In the case of large scale spills or when the product contaminates lakes, rivers or sewages, inform the appropriate authorities in accordance with local regulations.
- 6.3 **METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:**
Contain and mop up spills with non-combustible absorbent materials (earth, sand, vermiculite, diatomaceous earth, etc.). The contaminated area should be cleaned up immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises: water, ethanol or isopropanol and concentrated ammonia solution (d=0,880) = 45/50/5 parts by volume. Another possible (non-flammable) decontaminant is made up of water and sodium carbonate = 95/5 parts by weight. Add the same decontaminant to any residues and allow to stand for several days in an un-sealed container until no further reaction occurs. Keep the remains in a closed container.
- 6.4 **REFERENCE TO OTHER SECTIONS:**
For contact information in case of emergency, see section 1.
For information on safe handling, see section 7.
For exposure controls and personal protection measures, see section 8.
For waste disposal, follow the recommendations in section 13.

SECTION 7: HANDLING AND STORAGE

- 7.1 **PRECAUTIONS FOR SAFE HANDLING:**
Comply with the existing legislation on health and safety at work.
- General recommendations:
Usual protection measures for handling chemicals must be adopted. Use in areas free from sources of ignition and away from heat or electrical sources. Do not smoke. Avoid any type of leakage or escape. Keep the container tightly closed.
- Recommendations for the prevention of fire and explosion risks:
Vapours are heavier than air, may spread along floors to a considerable distance, can form explosive mixtures with air and are able to reach distant ignition sources and flame up or explode. Due to its flammability, this material should only be used in areas from which all naked lights and other sources of ignition have been excluded and away from other heat or electrical sources. Switch mobile phones off and do not smoke. No tools with a potential for sparks should be used.
Flashpoint 26 °C CLP 2.6.4.3.
Autoignition temperature: 400 °C
- Recommendations for the prevention of toxicological risks:
People with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which isocyanate containing products are used. Do not eat, drink or smoke while handling. After handling, wash hands with soap and water. For exposure controls and personal protection measures, see section 8.
- Recommendations for the prevention of environmental contamination:
It is not considered a danger to the environment. In the case of accidental spillage, follow the instructions indicated in section 6.
- 7.2 **CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:**
Forbid the entry to unauthorized persons. Keep away from food, drink and animal foodstuffs. Keep out of reach of children. This product should be stored isolated from heat and electrical sources. Do not smoke in storage area. If possible, avoid direct contact with sunlight. Avoid extreme humidity conditions. Precautions should be taken to minimise exposure to atmospheric humidity or water, as carbon dioxide may be formed which, in closed containers can result in pressurisation. Care should be taken when re-opening partly used containers. Due to the sensitivity to humidity of the isocyanates, this product should be kept in the original container, or under pressure of dried nitrogen, for example. In order to avoid leakages, the containers, after use, should be closed carefully and placed in a vertical position. For more information, see section 10.
- Class of store:
According to current legislation.
- Maximum storage period:
Not available.
- Temperature interval:
min:5 °C, max:30 °C (recommended).
- Incompatible materials:
Keep away from water, alkalis, amines, alcohols. Clean the application equipment with a compatible solvent.
- Type of packaging:
According to current legislation.
- Limit quantity (Seveso III): Directive 2012/18/EU:



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- Named dangerous substances/mixtures:None
- Hazard categories and lower-/upperthreshold quantities in tonnes (t):
- Physical hazards:Flammable liquid and vapour. (P5c) (5000t/50000t).
- Health hazards:Not applicable
- Environmental hazards:Not applicable
- Other hazards:Reacts violently with water. (O1) (100t/500t).
- Threshold quantity for the application of lower-tier requirements:100 tons
- Threshold quantity for the application of upper-tier requirements:500 tons

- Remarks:

The qualifying quantities set out above relate to each establishment. The quantities to be considered for the application of the relevant Articles are the maximum quantities which are present or are likely to be present at any one time. Dangerous substances present at an establishment only in quantities equal to or less than 2 % of the relevant qualifying quantity shall be ignored for the purposes of calculating the total quantity present, if their location within an establishment is such that it cannot act as an initiator of a major accident elsewhere at that establishment. For more details, see note 4 of Annex I of the Seveso Directive.

7.3 SPECIFIC END USE(S):

For the use of this product particular recommendations apart from that already indicated are not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

If a product contains ingredients with exposure limits, may be necessary a personnel monitoring, work place or biological, to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to EN689, EN14042 and EN482 standard concerning methods for assessing the exposure by inhalation to chemical agents, and exposure to chemical and biological agents. Reference should be also made to national guidance documents for methods for the determination of dangerous substances.

- OCCUPATIONAL EXPOSURE LIMIT VALUES (WEL)

EH40/2005 WELs (United Kingdom) 2018	Year	WEL-TWA		WEL-STEL		Remarks
		ppm	mg/m3	ppm	mg/m3	
n-butyl acetate	2015	50	237	150	713	Sk, Recommended BMGV, A3 BMGV
2-methoxy-1-methylethyl acetate	-	50	275	100	550	
Chlorobenzene	1995	10	46	-	-	
Reaction mass of ethylbenzene and xylene	1996	100	434	150	651	

WEL - Workplace Exposure Limit, TWA - Time Weighted Average (8 hours), STEL - Short Term Exposure Limit (15 min).

BMGV - Biological monitoring guidance value. BMGVs are non-statutory and any biological monitoring undertaken in association with a guidance value needs to be conducted on a voluntary basis (ie with the fully informed consent of all concerned).

Sk - Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

A3 - Carcinogenic in animals.

- Dermal (Sk):

Means that, in exposures to this substance, the contribution by the cutaneous route, including the mucous membranes and eyes, may result significant for the overall body content if no measures are taken to prevent absorption. There are some chemicals for which dermal absorption, both in liquid and vapour phases, can be very high, and this route of entry may be or equal or greater importance even that inhalation pathway. In these situations, the use of a biological control is essential in order to quantify the overall amount of contaminant absorbed.

- BIOLOGICAL LIMIT VALUES:

Biological monitoring can be a very useful complementary technique to air monitoring when air sampling techniques alone may not give a reliable indication of exposure. Biological monitoring is the measurement and assessment of hazardous substances or their metabolites in tissues, secretions, excreta or expired air, or any combination of these, in exposed workers. Measurements reflect absorption of a substance by all routes. Biological monitoring may be particularly useful in circumstances where there is likely to be significant skin absorption and/or gastrointestinal tract uptake following ingestion, where control of exposure depends on respiratory protective equipment, where there is a reasonably well-defined relationship between biological monitoring and effect, or where it gives information on accumulated dose and target organ body burden which is related to toxicity.

Substances that have established a biological limit value:

-

- DERIVED NO-EFFECT LEVEL (DNEL):

Derived no-effect level (DNEL) is a level of exposure that is considered safe, derived from toxicity data according to specific guidances included in REACH. DNEL values may differ from a occupational exposure limit (OEL) for the same chemical. OEL values may come recommended by a particular company, a government regulatory agency or an organization of experts. Although considered protective of health, the OEL values are derived by a process different of REACH.

- DERIVED NO-EFFECT LEVEL, WORKERS:-

Systemic effects, acute and chronic:

	DNEL Inhalation mg/m3		DNEL Cutaneous mg/kg bw/d		DNEL Oral mg/kg bw/d	
Reaction mass of ethylbenzene and xylene	289 (a)	77 (c)	s/r (a)	180 (c)	- (a)	- (c)
HDI oligomers, isocyanurate	s/r (a)	s/r (c)	s/r (a)	s/r (c)	- (a)	- (c)
Tosil-isocyanate	s/r (a)	3,24 (c)	s/r (a)	0,92 (c)	- (a)	- (c)
Chlorobenzene	70 (a)	23 (c)	15 (a)	5 (c)	- (a)	- (c)
n-butyl acetate	960 (a)	480 (c)	11 (a)	11 (c)	- (a)	- (c)
2-methoxy-1-methylethyl acetate	- (a)	275 (c)	- (a)	153,5 (c)	- (a)	- (c)



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- DERIVED NO-EFFECT LEVEL, WORKERS:- Local effects, acute and chronic:

Reaction mass of ethylbenzene and xylene

HDI oligomers, isocyanurate

Tosil-isocyanate

Chlorobenzene

n-butyl acetate

2-methoxy-1-methylethyl acetate

DNEL Inhalation
mg/m3

289 (a) s/r (c)

1 (a) 0,5 (c)

m/r (a) a/r (c)

94 (a) 42,3 (c)

960 (a) 480 (c)

- (a) - (c)

DNEL Cutaneous
mg/cm2

s/r (a) s/r (c)

a/r (a) a/r (c)

m/r (a) s/r (c)

- (a) b/r (c)

s/r (a) s/r (c)

- (a) - (c)

DNEL Eyes
mg/cm2

- (a) - (c)

s/r (a) - (c)

m/r (a) - (c)

b/r (a) - (c)

s/r (a) - (c)

- (a) - (c)

- Derived no-effect level, general population:

Not applicable (product for professional or industrial use).

(a) - Acute, short-term exposure, (c) - Chronic, long-term or repeated exposure.

(-) - DNEL not available (without data of registration REACH).

s/r - DNEL not derived (not identified hazard).

b/r - DNEL not derived (low hazard).

m/r - DNEL not derived (medium hazard).

a/r - DNEL not derived (high hazard).

- PREDICTED NO-EFFECT CONCENTRATION (PNEC):

- PREDICTED NO-EFFECT CONCENTRATION,
AQUATIC ORGANISMS:- Fresh water, marine
water and intermittent release:

Reaction mass of ethylbenzene and xylene

HDI oligomers, isocyanurate

Tosil-isocyanate

Chlorobenzene

n-butyl acetate

2-methoxy-1-methylethyl acetate

PNEC Fresh water
mg/l

0.327

0.127

0.03

0.032

0.18

0.635

PNEC Marine
mg/l

0.327

0.0127

0.003

0.0032

0.018

0.0635

PNEC Intermittent
mg/l

0.327

1.27

0.3

0.066

0.36

6.35

- WASTEWATER TREATMENT PLANTS (STP)
AND SEDIMENTS IN FRESH- AND MARINE
WATER:

Reaction mass of ethylbenzene and xylene

HDI oligomers, isocyanurate

Tosil-isocyanate

Chlorobenzene

n-butyl acetate

2-methoxy-1-methylethyl acetate

PNEC STP
mg/l

6.58

38.3

0.4

1.4

35.6

100

PNEC Sediments
mg/kg dw/d

12.46

266700

0.172

0.922

0.981

3.29

PNEC Sediments
mg/kg dw/d

12.46

26670

0.0172

0.0922

0.0981

0.329

- PREDICTED NO-EFFECT CONCENTRATION,
TERRESTRIAL ORGANISMS:- Air, soil and
effects for predators and humans:

Reaction mass of ethylbenzene and xylene

HDI oligomers, isocyanurate

Tosil-isocyanate

Chlorobenzene

n-butyl acetate

2-methoxy-1-methylethyl acetate

PNEC Air
mg/m3

-

s/r

s/r

s/r

s/r

-

PNEC Soil
mg/kg dw/d

2.31

53182

0.0168

0.166

0.0903

0.29

PNEC Oral
mg/kg dw/d

-

n/b

n/b

10

n/b

-

(-) - PNEC not available (without data of registration REACH).

n/b - PNEC not derived (not bioaccumulative potential).

s/r - PNEC not derived (not identified hazard).

8.2

EXPOSURE CONTROLS:

ENGINEERING MEASURES:



Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these measures are not sufficient to maintain concentrations of particulates and vapours below the Occupational Exposure Limits, suitable respiratory protection must be worn.

- Protection of respiratory system:

Avoid the inhalation of product.

- Protection of eyes and face:

It is recommended to install water taps, sources or eyewash bottles with clean water close to the working area.

- Protection of hands and skin:

It is recommended to install water taps or sources with clean water close to the working area. Barrier creams may help to protect the exposed areas of the skin. Barrier creams should not be applied once exposure has occurred.

OCCUPATIONAL EXPOSURE CONTROLS: REGULATION (EU) NO. 2016/425:

As a general measure on prevention and safety in the work place, we recommend the use of a basic personal protection equipment (PPE), with the corresponding marking. For more information on personal protective equipment (storage, use, cleaning, maintenance, type and characteristics of the PPE, protection class, marking, category, CEN norm, etc.), you should consult the informative brochures provided by the manufacturers of PPE.



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Mask: 	✓	Suitable respiratory protection at low concentrations or short-term incidence: In order to obtain a suitable protection level, the filter class must be selected depending on the type and concentration of the contaminating agents present, in accordance with the specifications supplied by the filter producers. For short periods of work, you can consider the utilisation of a combination mask with gas and particle filters, type A2-P2 (EN14387/EN143). In presence of high concentrations of vapour, use independent breathing apparatus.
Safety goggles: 	✓	Safety goggles for chemicals, with suitable lateral protection (EN166).
Face shield:		No.
Gloves: 	✓	Butyl rubber gloves, thick >0.5 mm (EN374). Fluorocarbon rubber gloves, thick >0.4 mm (EN374). Recommended minimal level 6, breakthrough time >480 min (protection for permanent contact). When short contact with the product is expected, use gloves with a protection level 3 or higher should be used, with a breakthrough time >60 min. The breakthrough time of the selected glove material should be in accordance with the pretended period of use. There are several factors (for example, temperature), they do in practice the period of use of a protective gloves resistant against chemicals is clearly lower than the established standard EN374. For the selection of a specific type of gloves for specific applications, with certain duration, it should take into account relevant factors to the workplace (without limitation to them), such as: Due to the wide variety of circumstances and possibilities, the instructions/specifications provided by the glove supplier should be taken into account. Use the proper technique of removing gloves (without touching glove's outer surface) to avoid contact of the product with the skin. The gloves should be immediately replaced when any sign of degradation is noted.
Boots:		No.
Apron: 	✓	Advisable.
Clothing: 	✓	Suitable work clothes which avoid contact with the product should be worn. Do not use contaminated clothing or shoes. Wash contaminated work clothes before wearing them again.

- Thermal hazards:

Not applicable (the product is handled at room temperature).

ENVIRONMENTAL EXPOSURE CONTROLS:

Avoid any spillage in the environment. Avoid any release into the atmosphere.

- Spills on the soil:

Prevent contamination of soil.

- Spills in water:

Do not allow to escape into drains, sewers or water courses.

-Water Management Act:

This product does not contain any substance included in the list of priority substances in the field of water policy under Directive 2000/60/EC~2013/39/EU.

- Emissions to the atmosphere:

Because of volatility, emissions to the atmosphere while handling and use may result. Avoid any release into the atmosphere.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Appearance

Physical state: Liquid
 Colour: Colourless
 Odour: Characteristic
 Odour threshold: 0,68 ppm

Change of state

Melting point: -46,00 °C
 Initial boiling point: 137 °C at 760 mmHg

- Flammability:

Flashpoint: 26 °C CLP 2.6.4.3.
 Lower/upper flammability or explosive limits: Not available - Not available
 Autoignition temperature: 400 °C

Stability

Decomposition temperature: Not available (lack of data).

pH-value

pH: Not available.

- Viscosity:

Dynamic viscosity: 0,8 cps at 20°C
 Kinematic viscosity: 0,27 mm²/s at 40°C
 Viscosity (flow time): 22 ± 28 sec.CF2 at 20°C

- Solubility(ies):

Solubility in water: Immiscible
 Liposolubility: Not applicable (inorganic substance).
 Partition coefficient: n-octanol/water: 0,56 (as log Pow)

- Volatility:

Vapour pressure: 4,5187 kPa at 50°C
 Evaporation rate: 66,23 nBuAc=100 25°C Relative

Density

Relative density: 0,991 at 20/4°C Relative water
 Relative vapour density: 3,91 at 20°C 1 atm. Relative air

Particle characteristics

Particle size: Not applicable.

- Explosive properties:

In the molecule there is no chemical groups associated with explosive properties.

- Oxidizing properties:

Not classified as oxidizing product.

9.2 OTHER INFORMATION:

Information regarding physical hazard classes

Flammable liquids: Combustibility: Combustible.

Other security features:

Molecular weight (numeric): 112,56 g/mol
 Surface tension: 33,3 din/cm at 20°C
 Heat of combustion: 6520 Kcal/kg
 VOC (supply): -9,999,0 % Weight
 VOC (supply): -99,045,0 g/l
 Isocyanates: Not available.

The values indicated do not always coincide with product specifications. The data for the product specifications can be found in the corresponding technical data sheet. For additional information concerning physical and chemical properties related to safety and environment, see sections 7 and 12.



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SECTION 10: STABILITY AND REACTIVITY

10.1	REACTIVITY: <u>- Corrosivity to metals:</u> It is not corrosive to metals. <u>- Pyrophorical properties:</u> It is not pyrophoric.
10.2	CHEMICAL STABILITY: Stable under recommended storage and handling conditions.
10.3	POSSIBILITY OF HAZARDOUS REACTIONS: Possible dangerous reaction with water, alkalis, amines, alcohols. Reacts violently with water. Exothermic reaction with amines and alcohols. Reacts with water under evolution of CO ₂ .
10.4	CONDITIONS TO AVOID: <u>- Heat:</u> Precautions must be taken to avoid exceeding the maximum storage temperature indicated, as this could give rise to an uncontrolled exothermic polymerisation taking place, and under extreme conditions, even to the container exploding. <u>- Light:</u> If possible, avoid direct contact with sunlight. <u>- Air:</u> The product is not affected by exposure to air, but should not be left the containers open. <u>- Humidity:</u> Avoid humidity. Not applicable (the product is handled at room temperature). <u>- Pressure:</u> Not relevant. <u>- Shock:</u> The product is not sensitive to shocks, but as a recommendation of a general nature should be avoided bumps and rough handling to avoid dents and breakage of packaging, especially when the product is handled in large quantities, and during loading and download operations.
10.5	INCOMPATIBLE MATERIALS: Keep away from water, alkalis, amines, alcohols. Clean the application equipment with a compatible solvent.
10.6	HAZARDOUS DECOMPOSITION PRODUCTS: As consequence of thermal decomposition, hazardous products may be produced, including isocyanates. No product of decomposition is dangerous if stored and handled properly.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	INFORMATION ON HAZARD CLASSES AS DEFINED IN REGULATION (EC) NO 1272/2008 : ACUTE TOXICITY:			
	Dose and lethal concentrations for individual ingredients:	DL50 (OECD401) mg/kg bw Oral	DL50 (OECD402) mg/kg bw Cutaneous	CL50 (OECD403) mg/m ³ ·4h Inhalation
	Reaction mass of ethylbenzene and xilene	4300 Rat	1700 Rabbit	> 22080 Rat
	HDI oligomers, isocyanurate	2500 Rat	> 2000 Rat	> 390 Rat
	Tosil-isocyanate	2330 Rat	> 2000 Rat	
	Chlorobenzene	> 2000 Rat	> 5000 Rabbit	> 13600 Rat
	n-butyl acetate	10768 Rat	17600 Rabbit	> 23400 Rat
	2-methoxy-1-methylethyl acetate	8532 Rat	> 5000 Rat	> 35700 Rat
	Estimates of acute toxicity (ATE) for individual ingredients:	ATE mg/kg bw Oral	ATE mg/kg bw Cutaneous	ATE mg/m ³ ·4h Inhalation
	Reaction mass of ethylbenzene and xilene	-	*1700	11000 Vapours
	HDI oligomers, isocyanurate	-	-	11000 Vapours
	Chlorobenzene	-	-	13600 Vapours
	n-butyl acetate	-	-	23400 Vapours
	2-methoxy-1-methylethyl acetate	-	-	35700 Vapours
	(*) - Point estimates of acute toxicity corresponding to the classification category (see GHS/CLP Table 3.1.2). These values are designed to be used in the calculation of the ATE for classification of a mixture based on its components and do not represent test results. (-) - The components that are assumed to have no acute toxicity at the upper threshold of category 4 for the corresponding exposure route are ignored.			
	- No observed adverse effect level	NOAEL Oral mg/kg bw/d	NOAEL Cutaneous mg/kg bw/d	NOAEC Inhalation mg/m ³
	Chlorobenzene	125 Rat		
	<u>- Lowest observed adverse effect level</u> Not available			
	INFORMATION ON LIKELY ROUTES OF EXPOSURE: ACUTE TOXICITY:			
	Routes of exposure	Acute toxicity	Cat.	Main effects, acute and/or delayed
				Criteria



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Inhalation: Not classified	ATE > 20000 mg/m3	-	Not classified as a product with acute toxicity if inhaled (based on available data, the classification criteria are not met).	GHS/CLP 3.1.2. OECD 403
Skin: Not classified	ATE > 5000 mg/kg bw	-	Not classified as a product with acute toxicity in contact with skin (based on available data, the classification criteria are not met).	GHS/CLP 3.1.2. OECD 402
Eyes: Not classified	Not available.	-	Not classified as a product with acute toxicity by eye contact (lack of data).	GHS/CLP 1.2.5.
Ingestion: Not classified	ATE > 2000 mg/kg bw	Not available.	Not classified as a product with acute toxicity if swallowed (based on available data, the classification criteria are not met).	GHS/CLP 3.1.2. OECD 401

CORROSION / IRRITATION / SENSITISATION :

Danger class	Target organs	Cat.	Main effects, acute and/or delayed	Criteria
- Respiratory corrosion/irritation: 	Respiratory tract 	Cat.3	IRRITANT: May cause respiratory irritation.	GHS/CLP 1.2.6. 3.8.2.2.1.
- Skin corrosion/irritation: 	Skin 	Cat.2	IRRITANT: Causes skin irritation.	GHS/CLP 3.2.2. OECD 404
- Serious eye damage/irritation: 	Eyes 	Cat.2	IRRITANT: Causes serious eye irritation.	GHS/CLP 3.3.2. OECD 405
- Respiratory sensitisation: Not classified	-	-	Not classified as a product sensitising by inhalation (lack of data).	GHS/CLP 3.4.2.1.
- Skin sensitisation: 	Skin 	Cat.1	SENSITISING: May cause an allergic skin reaction.	GHS/CLP 3.4.2.2. OECD 406

- ASPIRATION HAZARD:

Danger class	Target organs	Cat.	Main effects, acute and/or delayed	Criteria
- Aspiration hazard: 	Lungs 	Cat.1	HAZARD OF ASPIRATION: May be fatal if swallowed and enters airways.	GHS/CLP 3.10.2.

SPECIFIC TARGET ORGANS TOXICITY (STOT): Single exposure (SE) and/or Repeated exposure (RE):

Effects	SE/RE	Target organs	Cat.	Main effects, acute and/or delayed	Criteria
- Systemic:	RE 	Systemic 	Cat.2	HARMFUL: May cause damage to organs through prolonged or repeated exposure if inhaled.	GHS/CLP 3.8.3.4
- Respiratory effects:	SE 	Respiratory tract 	Cat.3	IRRITANT: May cause respiratory irritation.	GHS/CLP 3.8.3.4
- Cutaneous:	RE	Skin 	-	DEFATTENING: Repeated exposure may cause skin dryness or cracking.	GHS/CLP 1.2.4.
- Neurological:	SE 	CNS 	Cat.3	NARCOSIS: May cause drowsiness or dizziness if inhaled.	GHS/CLP 3.8.2.2.2.

CMR EFFECTS:- Carcinogenic effects:

It is not considered as a carcinogenic product.

- Genotoxicity:

It is not considered as a mutagenic product.

- Toxicity for reproduction:

Does not harm fertility. Does not harm the unborn child.



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	HDI oligomers, isocyanurate		-	-	1	Not easy
	Tosil-isocyanate		-	-	-	Easy
	Chlorobenzene		-	-	15	Not easy
	n-butyl acetate	2204	80	82	83	Easy
	2-methoxy-1-methylethyl acetate	1520	22	78	90	Easy

Note: Biodegradability data correspond to an average of data from various bibliographic sources.

- Hydrolysis:

Reacts with water forming carbon dioxide and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (e.g. detergents) or by watersoluble solvents.

- Photodegradability:

Not available.

12.3 BIOACCUMULATIVE POTENTIAL:

Not bioaccumulable.

Bioaccumulation for individual ingredients	logPow	BCF L/kg	Potential
Reaction mass of ethylbenzene and xilene	3.16	56.5 (calculated)	Low
HDI oligomers, isocyanurate	5.54	3.2 (calculated)	No bioaccumulable
Tosil-isocyanate	2.34	16.3 (calculated)	Unlikely, low
Chlorobenzene	3	40 (calculated)	Low
n-butyl acetate	1.81	6.9 (calculated)	No bioaccumulable
2-methoxy-1-methylethyl acetate	0.56	3.2 (calculated)	No bioaccumulable

12.4 MOBILITY IN SOIL:

Not available

Mobility for individual ingredients	log Pod	Constant of Henry Pa·m ³ /mol 20°C	Potential
Reaction mass of ethylbenzene and xilene	2,25	660 (calculated)	Low
HDI oligomers, isocyanurate		0 (calculated)	No bioaccumulable
Tosil-isocyanate	2,38		Unlikely, low
Chlorobenzene	2,4	368 (calculated)	Low
n-butyl acetate	1,84	28,5 (calculated)	No bioaccumulable
2-methoxy-1-methylethyl acetate	0,23	0,42 (calculated)	No bioaccumulable

12.5 RESULTS OF PBT AND VPVB ASSESMENT:(Annex XIII of Regulation (EC) no. 1907/2006:)

Do not fulfil the PBT/vPvB criteria : Half-life in the marine environment < 60 days,Half-life in fresh-water or estuarine < 40 days,Half-life in marine sediments < 180 days,Half-life in sediments of fresh-water or estuarine < 120 days,Half-life in the soil < 120 days,Bioconcentration factor BCF < 2000,Long term 'No observed effect concentration' for fresh-water or marine organisms NOEC > 0.01 mg/l,It is NOT classified as CMR,It has NO endocrine disrupting potential.

12.6 ENDOCRINE DISRUPTING PROPERTIES:

This product does not contain substances with endocrine disrupting properties identified or under evaluation.

12.7 OTHER ADVERSE EFFECTS:

- Ozone depletion potential:

Not dangerous for the ozone layer.

- Photochemical ozone creation potential:

Not available.

- Earth global warming potential:

In case of fire or incineration liberates CO₂.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:Directive 2008/98/EC~Regulation (EU) no. 1357/2014:

Take all necessary measures to prevent the production of waste whenever possible. Analyse possible methods for revaluation or recycling. Do not discharge into drains or the environment, dispose at an authorised waste collection point. Waste should be handled and disposed in accordance with current local and national regulations. For exposure controls and personal protection measures, see section 8.

Disposal of empty containers:Directive 94/62/EC~2015/720/EU, Decision 2000/532/EC~2014/955/EU:

Emptied containers and packaging should be disposed in accordance with currently local and national regulations.The classification of packaging as hazardous waste will depend on the degree of emptying of the same, being the holder of the residue responsible for their classification, in accordance with Chapter 15 01 of Decision 2000/532/EC, and forwarding to the appropriate final destination.With contaminated containers and packaging, adopt the same measures as for the product in itself.

Procedures for neutralising or destroying the product:

Controlled incineration in special facilities for chemical waste, in accordance with local regulations.



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SECTION 14: TRANSPORT INFORMATION

14.1	<u>UN NUMBER OR ID NUMBER:</u> 1263
14.2	<u>UN PROPER SHIPPING NAME:</u> PAINT
14.3	<p><u>TRANSPORT HAZARD CLASS(ES):</u></p> <p><u>Transport by road (ADR 2021) and</u> <u>Transport by rail (RID 2021):</u></p> <ul style="list-style-type: none"> - Class: 3 - Packing group: III - Classification code: F1 - Tunnel restriction code: (E) - Transport category: 3, max. ADR 1.1.3.6. 1000 L - Limited quantities: 5 L (see total exemptions ADR 3.4) - Transport document: Consignment paper. - Instructions in writing: ADR 5.4.3.4 <p><u>Transport by sea (IMDG 39-18):</u></p> <ul style="list-style-type: none"> - Class: 3 - Packing group: III - Emergency Sheet (EmS): F-E,S_E - First Aid Guide (MFAG): 310,313 - Marine pollutant: No. - Transport document: Shipping Bill of lading. <p><u>Transport by air (ICAO/IATA 2021):</u></p> <ul style="list-style-type: none"> - Class: 3 - Packing group: III - Transport document: Air Bill of lading. <p><u>Transport by inland waterways (ADN):</u> Not available</p>
14.4	<u>PACKING GROUP:</u> See section 14.3
14.5	<u>ENVIRONMENTAL HAZARDS:</u> Not applicable (not classified as hazardous for the environment).
14.6	<u>SPECIAL PRECAUTIONS FOR USER:</u> Ensure that persons transporting the product know what to do in case of accident or spill. Always transport in closed containers that are upright and secure. Ensure adequate ventilation.
14.7	<u>MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS:</u> Not available.

SECTION 15: REGULATORY INFORMATION

15.1	<p><u>SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:</u></p> <p>The regulations applicable to this product generally are listed throughout this Safety Data Sheet.</p> <p><u>Restrictions on manufacture, placing on market and use:</u> See section 1.2</p> <p><u>Tactile warning of danger:</u> Not applicable (product for professional or industrial use).</p> <p><u>Child safety protection:</u> Not applicable (product for professional or industrial use).</p> <p><u>OTHER REGULATIONS:</u> <u>Control of the risks inherent in major accidents (Seveso III):</u> See section 7.2</p> <p><u>Other local legislations:</u> The receiver should verify the possible existence of local regulations applicable to the chemical.</p>
15.2	<p><u>CHEMICAL SAFETY ASSESSMENT:</u></p> <p>A chemical safety assessment has been carried out for this product.</p>



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SECTION 16 : OTHER INFORMATION

16.1 TEXT OF THE PHRASES AND NOTES REFERENCED IN SECTIONS 2 AND/OR 3:

Hazard statements according the Regulation (EU) No. 1272/2008~2021/849 (CLP), Annex III:

H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. 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. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects. EUH014 Reacts violently with water. EUH066 Repeated exposure may cause skin dryness or cracking. H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

ADVICES ON ANY TRAINING APPROPRIATE FOR WORKERS:

It is recommended for all staff that will handle this product to carry out a basic training in occupational risk and prevention, in order to provide understanding and interpretation of Safety Data Sheets and labelling of products as well.

MAIN LITERATURE REFERENCES AND SOURCES FOR DATA:

- European Chemicals Agency: ECHA, <http://echa.europa.eu/>
- Access to European Union Law, <http://eur-lex.europa.eu/>
- Industrial Solvents Handbook, Ibert Mellan (Noyes Data Co., 1970).
- Threshold Limit Values, (ACGIH, 2021).
- European agreement on the international carriage of dangerous goods by road, (ADR 2021).
- International Maritime Dangerous Goods Code IMDG including Amendment 39-18 (IMO, 2018).

ABBREVIATIONS AND ACRONYMS:

List of abbreviations and acronyms that can be used (but not necessarily used) in this Safety Data Sheet:

- REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals of the United Nations.
- CLP: European regulation on Classification, Labelling and Packaging of substances and chemical mixtures.
- EINECS: European Inventory of Existing Commercial Chemical Substances.
- ELINCS: European List of Notified Chemical Substances.
- CAS: Chemical Abstracts Service (Division of the American Chemical Society).
- UVCB: Substances of Unknown or Variable composition, complex reaction products or biological materials.
- SVHC: Substances of Very High Concern.
- PBT: Persistent, bioaccumulable and toxic substances.
- vPvB: Very persistent and very bioaccumulable substances.
- VOC: Volatile Organic Compounds.
- DNEL: Derived No-Effect Level (REACH).
- PNEC: Predicted No-Effect Concentration (REACH).
- LC50: Lethal concentration, 50 percent.
- LD50: Lethal dose, 50 percent.
- UN: United Nations Organisation.
- ADR: European agreement concerning the international carriage of dangerous goods by road.
- RID: Regulations concerning the international transport of dangerous goods by rail.
- IMDG: International Maritime code for Dangerous Goods.
- IATA: International Air Transport Association.
- ICAO: International Civil Aviation Organization.

SAFETY DATA SHEET REGULATIONS:

Safety Data Sheet in accordance with Article 31 of Regulation (EC) No. 1907/2006 (REACH) and Annex of Regulation (EU) No. 2020/878.

HISTORIC: REVISION:

Version: 1 04/11/2022

Version: 2 27/03/2023

Changes since previous Safety Data Sheet:

Changes that have been introduced with respect to the previous version due to the structural and content adaptation of the Safety Data Sheet to Regulation (EU) No. 2020/878: All sections.

The information of this Safety Data Sheet, is based on the present state of knowledge and on current UE and national laws, as the users" working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified, without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this Safety Data Sheet is meant as a description of the safety requirements of the product and it is not to be considered as a guarantee of the product"s properties.