kilnher group®

SAFETY DATA SHEET
SEALANTS CEMHER

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - Europe

Product:
MAXIPUR 25% Comp. B

Version 0.15 / 13.11.2023

Replaces all previous versions

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

1.1 Product identifier

Product name: MAXIPUR 25% COMP. B

Product type: Curing agent

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

Field of application: used only as part of two- or multi component products.

Ready-for-use mixture: (see base component)

Identified uses: Industrial applications, professional applications.

1.3 Details of the supplier of the safety data sheet

Company: PINTURAS KILNHER
Address: Pol. Ind. La Figuera, C/LLanterners, 44. 46394
City: ALACUAS
Province: VALENCIA
Telephone: (+34) 961 505 024
Fax: (+34) 961 505 024
E-mail: kilnher@kilnher.com
Web: www.kilnher.com

1.4 Emergency telephone number

(+34) 961 505 024 (Only available during office hours; Monday-Friday; 07:00-15:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard class	Hazard category	Indications of danger
FLAMMABLE LIQUIDS	3	H226
ACUTE TOXICITY (inhalation)	4	H332
SKIN CORROSION/IRRITATION	2	H315
SKIN SENSITIZATION	1	H317
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation)	3	H335

* See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms

Signal word
Warning

Hazard statements

H226 - Flammable liquid and vapor.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H332 - Harmful if inhaled.
H335 - May cause respiratory irritation.

Precautionary statements

Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hazardous ingredients

hexamethylene diisocyanate, oligomerisation product (biuret type) hexamethylene-diisocyanate

Supplemental label elements

Contains isocyanates. May produce an allergic reaction. As from August 24 2023 adequate training is required before industrial or professional use.

Special packaging requirements

Containers to be fitted with child-resistant fastenings: Not applicable.
Tactile warning of danger: Not applicable

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result None known.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hexamethylene diisocyanate, oligomerisation product (biuret type)[1]	REACH #: 01-2119970543-34 EC: 500-060-2 CAS: 28182-81-2	≥50 - ≤75	Acute Tox. 4, H332 ATE [Inhalation (dusts and mists)] = 1.5 mg/l Skin Sens. 1, H317 STOT SE 3, H335
2-methoxy-1-methylethyl acetate[1] [2]	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6	≥10 - <20	Flam. Liq. 3, H226 STOT SE 3, H336
xylene [1] [2]	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7	≥10 - ≤22	Flam. Liq. 3, H226 ATE [Dermal] = 1100 mg/kg Acute Tox. 4, H312 ATE [Inhalation (gases)] = 5000 ppm Skin Irrit. 2, H315
ethylbenzene [1] [2]	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥1 - ≤3	Flam. Liq. 2, H225 ATE [Inhalation (gases)] = 4500 ppm Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304
hexamethylene-di-isocyanate	REACH #: 01-2119457571-37 EC: 212-485-8 CAS: 822-06-0 Index: 615-011-00-1	<0.5	Acute Tox. 4, H302 ATE [Oral] = 746 mg/kg Acute Tox. 1, H330 ATE [Inhalation (vapours)] = 0.124Resp. Sens. 1, H334: C≥ 0.5% mg/l Eye Irrit. 2, H319 Skin Sens. 1, H317: C ≥ 0.5% Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335

* See Section 16 for the full text of the H statements declared above.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit, see section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

General
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).

Eye contact
Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention/advice.

Inhalation
Remove to fresh air and keep at rest in a position comfortable for breathing. Give nothing by mouth. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately.

Skin contact
Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion
If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.

Protection of first-aiders
No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed Potential acute health effects

Eye contact
No known significant effects or critical hazards.

Inhalation
Harmful if inhaled. May cause respiratory irritation.

Skin contact
Causes skin irritation. May cause an allergic skin reaction.

Ingestion
No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact
Adverse symptoms may include the following: pain or irritation watering redness

Inhalation
Adverse symptoms may include the following: respiratory tract irritation coughing

Skin contact
Adverse symptoms may include the following: irritation redness

Ingestion
No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: If gasses have been inhaled, from the decomposition of the product, symptoms may be delayed. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media : Recommended: alcohol resistant foam, CO2, powders, water spray.
Not to be used: waterjet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or heated, mixture: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous combustion products: Decomposition products may include the following materials: carbon oxides metal oxide/oxides.

5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 Environment related measures

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used. Contains isocyanates. Exposure to isocyanate may result in acute irritation and/or sensitisation when breathing.

Care should be taken when re-opening partly-used containers.
Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Product/ingredient name	Exposure limit values
2-methoxy-1-methylethyl acetate	**EU OEL (Europe, 1/2022). Absorbed through skin.** STEL: 550 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 275 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
xylene	**EU OEL (Europe, 1/2022). [xylene, mixed isomers pure] Absorbed through skin.** TWA: 50 ppm 8 hours. TWA: 221 mg/m³ 8 hours. STEL: 100 ppm 15 minutes. STEL: 442 mg/m³ 15 minutes.
ethylbenzene	**EU OEL (Europe, 1/2022). Absorbed through skin.** STEL: 884 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 442 mg/m³ 8 hours. TWA: 100 ppm 8 hours.
hexamethylene-di-isocyanate	**EU OEL (Europe, 2/2010).** (ACGIH) TWA: 0.03 mg/m³ 8 hours. (ACGIH) TWA: 0.01 ppm 8 hours.

8.1.1 Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required 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 monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.1.2 Derived effect levels

Product / ingredient name	Type	Exposure	Value	Population	Effects
2-methoxy-1-methylethyl acetate	DNEL	Long term Dermal	796 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	275 mg/m³	Workers	Systemic
xylene	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
ethylbenzene	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
trimethylolpropane	DNEL	Long term Inhalation	0.035 mg/m³	Workers	Systemic

8.1.3 Predicted effect concentrations

Product / ingredient name	Compartment Detail	Value	Method Detail
xylene	Fresh water	0.327 mg/l	-
	Marine water	0.327 mg/l	-
	Fresh water sediment	12.46 mg/kg	-
	Marine water sediment	12.46 mg/kg	-
	Soil	2.31 mg/kg	-
	Sewage Treatment Plant	6.68 mg/l	-
ethylbenzene	Fresh water	0.1 mg/l	-
	Marine water	0.01 mg/l	-
	Fresh water sediment	13.7 mg/kg	-
	Soil	2.68 mg/kg	-
	Sewage Treatment Plant	9.6 mg/l	-
hexamethylene-di-isocyanate	Fresh water	77.4 µg/l	-
	Marine water	7.74 µg/l	-
	Fresh water sediment	13.34 mg/kg	-
	Marine water sediment	1.33 mg/kg	-
	Soil	2.6 mg/kg	-
	Sewage Treatment Plant	8.42 mg/l	-

8.2 Exposure controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the workstation location.

8.2.1 Individual protection measures

General
Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.

Hygiene measures
Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Hand protection

Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.
Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:
Recommended: Silver Shield / Barrier / 4H gloves, polyvinyl alcohol (PVA), Viton® May be used: nitrile rubber
Short term exposure: neoprene rubber, butyl rubber, natural rubber (latex), polyvinyl chloride (PVC)

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.
Wear suitable protective clothing. Always wear protective clothing when spraying.

Respiratory protection

When the product is applied by spraying and for continuous or prolonged work always wear an air-fed respirator e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Be sure to use an approved/certified respirator or equivalent. Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

8.2.2 Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid
Color: Transparent
Odor: Solvent-like
pH: Testing not relevant or not possible due to nature of the product.
Melting point/freezing point: -39.85°C This is based on data for the following ingredient: hexamethylene diisocyanate, oligomerisation product (biuret type)
Boiling point/boiling range: Testing not relevant or not possible due to nature of the product
Flash point: Closed cup: 40°C (104°F)
Evaporation rate: Testing not relevant or not possible due to nature of the product.
Flammability: Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosive (flammable) limits: 0.8 - 7 vol %
Vapor pressure: 0 kPa This is based on data for the following ingredient: hexamethylene diisocyanate, oligomerisationproduct (biuret type)
Vapor density: Testing not relevant or not possible due to nature of the product.
Specific gravity: 0,95 g/cm³
Partition coefficient (LogKow): Testing not relevant or not possible due to nature of the product.

Auto-ignition temperature: Lowest known value: 333°C (631.4°F) (2-methoxy-1-methylethyl acetate).
Decomposition temperature: Testing not relevant or not possible due to nature of the product.
Viscosity: Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.
Explosive properties: Testing not relevant or not possible due to nature of the product.
Oxidizing properties: Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight: Weighted average: 40 %
Water % by weight: Weighted average: 0 %
VOC content: 410 g/l
TOC Content: Weighted average: 205 g/l
Solvent Gas: Weighted average: 0.065 m³/l

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials. Reactive or incompatible with the following materials: reducing materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed: Decomposition products may include the following materials: carbon oxides metal oxide/oxides

SECTION 11: Toxicological information

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

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Isocyanate containing products have characteristics that include producing acute irritation and/or sensitisation when breathing, subsequent asthmatic problems and lung contractions. Sensitised people can, as a result from this, show asthmatic symptoms with exposure to atmospheric concentrations far below the TLV. Repeated exposures will lead to permanent damage to the respiratory system.

11.1.1 Acute toxicity

Product / ingredient name	Result	Species	Dose	Exposure
hexamethylene diisocyanate, oligomerisation product (biuret type)	LC50 Inhalation Dusts and mists	Rat	18500 mg/m³	1 hours
2-methoxy-1-methylethyl acetate	LC50 Inhalation Dusts and mists	Rat	1.5 mg/l	4 hours
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	8532 mg/kg	-
xylene	LC50 Inhalation Gas	Rat	5000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	6350 ppm	4 hours
	LD50 Dermal	Rabbit	>4200 mg/kg	-
	LD50 Oral	Rat	3523 mg/kg	-
ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
hexamethylene-di-isocyanate	LC50 Inhalation Dusts and mists	Rat	124 mg/m³	4 hours
	LC50 Inhalation Vapor	Rat	0.124 mg/l	4 hours
	LD50 Dermal	Rabbit	>7000 mg/kg	-
	LD50 Oral	Rat	746 mg/kg	-

11.1.2 Acute toxicity estimates

Product / ingredient name	Oral mg/kg	Dermal mg/kg	Inhalation (gases) ppm	Inhalation (vapors) mg/l	Inhalation (dusts and mists) mg/l
Hempel's Curing Agent 95370	-	12141.9	44368.6	43.1	2.3
hexamethylene diisocyanate, oligomerisation product	-	-	-	-	1.5
2-methoxy-1-methylethyl acetate	8532	-	-	-	-
xylene	3523	1100	5000	-	-
ethylbenzene	3500	-	4500	11	-
hexamethylene-di-isocyanate	746	-	-	0.124	-

11.1.3 Irritation/Corrosion

Product / ingredient name	Result	Species	Score	Exposure
oligomerisation product (biuret type)	Eyes - Mild irritant	Rabbit	-	-
	Respiratory - Mild irritant	Rabbit	-	-
	Skin - Mild irritant	Rabbit	-	-
2-methoxy-1-methylethyl acetate	Eyes - Mild irritant	Rabbit	-	-
	Respiratory - Mild irritant	Rabbit	-	-
xylene	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams
	Skin - Irritant	Rabbit	-	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams
ethylbenzene	Eyes - Mild irritant	Rabbit	-	-
	Respiratory - Mild irritant	Rabbit	-	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams
hexamethylene-di-isocyanate	Eyes - Severe irritant	Rabbit	-	-
	Respiratory - Severe irritant	Rabbit	-	-
	Skin - Severe irritant	Rabbit	-	-

11.1.4 Sensitizer

Product / ingredient name	Route of exposure	Species	Result
hexamethylene diisocyanate,oligomerisation product (biurettype)	skin	Guinea pig	Sensitizing
hexamethylene-di-isocyanate	skin	Guinea pig	Sensitizing

11.1.5 Mutagenic effects

No known significant effects or critical hazards.

11.1.6 Carcinogenicity

No known significant effects or critical hazards.

11.1.7 Reproductive toxicity

No known significant effects or critical hazards.

11.1.8 Teratogenic effects

No known significant effects or critical hazards.

11.1.9 Specific target organ toxicity (single exposure)

Product / ingredient name	Category	Route of exposure	Target organs
hexamethylene diisocyanate, oligomerisation product (biuret type)	3	-	Respiratory tract irritation
2-methoxy-1-methylethyl acetate	3	-	Narcotic effects

11.1.10 Specific target organ toxicity (repeated exposure)

Product / ingredient name	Category	Route of exposure	Target organs
ethylbenzene	2	-	hearing organs

11.1.11 Aspiration hazard

Product / ingredient name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1

11.1.12 Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

11.1.13 Potential chronic health effects

No known significant effects or critical hazards.

11.2 Information on other hazards

Sensitization: Contains hexamethylene diisocyanate, oligomerisation product (biuret type), hexamethylenediisocyanate.
May produce an allergic reaction.
Endocrine disrupting properties: See Section 15 for details.
Other information: No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses.

Product / ingredient name	Result	Species	Exposure
hexamethylene diisocyanate, oligomerisation product (biuret type)	Acute EC50 >100 mg/l	Algae	72 hours
2-methoxy-1-methylethyl acetate	Acute LC50 100 - 180 mg/l	Fish	96 hours
ethylbenzene	Chronic NOEC <1000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours

12.2 Persistence and degradability

Product / ingredient name	Test	Result	Dose	Inoculum	Aquatic half-life	Photolysis	Biodegradability
hexamethylene diisocyanate, oligomerisation product (biuret type)	-	1 % - Not readily - 28 days	-	-	-	-	Not Readily
2-methoxy-1-methylethyl acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	90 % - Readily - 28 days	-	-	-	-	Readily
	OECD 301F Ready Biodegradability - Manometric Respirometry Test	83 % - Readily - 28 days	-	-			
xylene	OECD 301F Ready Biodegradability - Manometric Respirometry Test	90 - 98 % - Readily - 28 days	-	-	-	-	Readily
	-	>60 % - Readily - 28 days	-	-			
ethylbenzene	-	>70 % - Readily - 28 days	-	-	-	-	Readily
trimethylolpropane	-	42 % - Not readily - 28 days	-	-	-	-	Not Readily

12.3 Bioaccumulative potential

Product / ingredient name	LogPow	BCF	Potential
hexamethylene diisocyanate, oligomerisation product (biuret type)	5.54	-	high
2-methoxy-1-methylethyl acetate	1.2	-	low
xylene	3.12	8.1 - 25.9	low
ethylbenzene	3.6	-	low
hexamethylene-di-isocyanate	0.02	57.63	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}): No known data avaliable in our database.
Mobility: No known data avaliable in our database.

12.5 Results of PBT and vPvB assessment

Product/ingredient name **PBT, P, B, T, vPvB, vP, vB.**
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

See Section 15 for details.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.
European waste catalogue no. (EWC) is given below.
European waste catalogue (EWC) : 08 01 11*

Packaging
The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN / ID no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards	Additional information
ADR/RID Class	UN1263	PAINT	3 	III	No.	Tunnel code (D/E)
IMDG Class	UN1263	PAINT	3 	III	No.	Emergency schedules F-E, S-E
IATA Class	UN1263	PAINT	3 	III	No.	-

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization - Substances of very high concern

Annex XIV - None of the components are listed.

Substances of very high concern None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles. As from August 24 2023 adequate training is required before industrial or professional use.

Other EU regulations

Seveso category This product is controlled under the Seveso III Directive.

Seveso category
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

15.2 Chemical Safety Assessment

-

SECTION 16: Other information

16.1 Abbreviations and acronyms

ATE Acute Toxicity Estimate
CLP Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
EUH statement CLP-specific Hazard statement
RRN REACH Registration Number
DNEL Derived No Effect Level
PNEC Predicted No Effect Concentration

16.2 Full text of abbreviated H statements : Full text of classifications [CLP/GHS]

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
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.
H330	Fatal if inhaled
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.
H373	May cause damage to organs through prolonged or repeated exposure.

Acute Tox. 1	Category 1	ACUTE TOXICITY
Acute Tox. 4	Category 4	ACUTE TOXICITY
Asp. Tox. 1	Category 1	ASPIRATION HAZARD
Eye Irrit. 2	Category 2	SERIOUS EYE DAMAGE/ EYE IRRITATION
Flam. Liq. 2	Category 2	FLAMMABLE LIQUIDS
Flam. Liq. 3	Category 3	FLAMMABLE LIQUIDS
Resp. Sens. 1	Category 1	RESPIRATORY SENSITIZATION
Skin Irrit. 2	Category 2	SKIN CORROSION/IRRITATION
Skin Sens. 1	Category 1	SKIN SENSITIZATION
STOT RE 2	Category 2	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)
STOT SE 3	Category 3	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)

16.3 Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
FLAMMABLE LIQUIDS	On basis of test data
ACUTE TOXICITY (inhalation)	Calculation method
SKIN CORROSION/IRRITATION	Calculation method
SKIN SENSITIZATION	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation)	Calculation method

16.4 Notice to reader

Indicates information that has changed from previously issued version.
The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical preformance or suitability for particular applications.
It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

SECTION 17: Safe Use of Mixture Information

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

17.1 General description of the process covered

Indoor or outdoor spray painting by professionals or with brush, roller, putty knife, dipping etc. with good general room ventilation

This safe use information is linked to: Professional spray painting and/or low-energy painting, Substance-specific isocyanate
Sector(s) of use: Industrial uses - Professional uses
Product category(ies): Coatings and paints, thinners, paint removers

17.2 Operational conditions

Place of use: Indoor or outdoor use
Range of application/Process conditions: Assumes that activities are undertaken with appropriate and well maintained equipment by trained personnel operating under supervision.
As from August 24 2023 adequate training is required before industrial or professional use.

17.3 Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation		Respiratory	Eye	Hands
			Type and air changes per hour				
Preparation of material for application	PROC05	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374 in combination with 'basic' employee training.
Loading of application equipment and handling of coated parts before curing	PROC08a	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374 in combination with 'basic' employee training.
Professional application of coatings by brush or roller	PROC10	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374 combination with 'basic' employee training.
Professional application of coatings by spraying	PROC11	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374 combination with 'basic' employee training.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	None	None
Cleaning	PROC05	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374 combination with 'basic' employee training.
Waste management	PROC08a	More than 4 hours	Good general room ventilation - Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374 combination with 'basic' employee training.

*See chapter 8 of this Safety Data Sheet for specifications.

17.4 Further information

The information in this Safe Use of Mixture Information (SUMI) sheet is based on the data provided by the substance supplier for the substances in the product for which a chemical safety assessment has been carried out at the time of issue. It does not guarantee safe use of the product and does not replace any occupational risk assessment required by legislation. When developing workplace instructions for employees, SUMI sheets should always be considered in combination with the Safety Data Sheet (SDS) and the label of the product.
No liability is accepted for any damage, no matter of what kind, which is a direct or indirect consequence of acts and/or decisions based on the contents of this document.