## SAFETY DATA SHEET



SI HPU6210 2,5L

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

#### 1.1 Product identifier

Product name : SI HPU6210 2.5L

5261090

Product code : 5261089

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

Hardener. Industrial use only.

Product is not intended for consumer use.

### 1.3 Details of the supplier of the safety data sheet

Akzo Nobel Hilden GmbH Düsseldorfer Straße 96-100

D-40721 Hilden Deutschland

Tel: (+49) 02103-77253 Fax: (+49) 02103-77242

Internet: https://www.akzonobel.com/wood/

e-mail address of person : andrea.krause@akzonobel.com

responsible for this SDS

## 1.4 Emergency telephone number

**Supplier** 

**Telephone number** : (+49) 02103-77253

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 2, H225 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H336

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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

### 2.2 Label elements

Hazard pictograms



Signal word : Danger

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## **SECTION 2: Hazards identification**

**Hazard statements** 

: Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction. May cause drowsiness or dizziness.

**Precautionary statements** 

**Prevention** 

: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof [electrical/ventilating/lighting] equipment.

Response

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

**Storage** 

: Keep cool.

**Disposal** 

: Dispose of contents and container in accordance with local, regional, national and international regulations.

**Hazardous ingredients** 

: n-butyl acetate, ethyl acetate, 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 1,3-diisocyanatomethylbenzene and 2,2'-oxybis[ethanol], Benzene, 1,

3-diisocyanatomethyl-, homopolymer, m-tolylidene diisocyanate

Supplemental label

elements

: Contains isocyanates. May produce an allergic reaction.

As from 24 August 2023 adequate training is required before industrial or professional use.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

#### 2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

: No known significant effects or critical hazards.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification  Regulation (EC) No. 1272/2008 [CLP]	Specific Conc. Limits, M-factors and ATEs	Туре

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## **SECTION 3: Composition/information on ingredients**

n-butyl acetate	REACH #:	≥25 - ≤50	Flam. Lig. 3, H226	-	[1]
	01-2119485493-29		STOT SE 3, H336		
	EC: 204-658-1		EUH066		
	CAS: 123-86-4				
	Index: 607-025-00-1				
ethyl acetate	REACH #:	≥25 - ≤50	Flam. Liq. 2, H225	-	[1]
	01-2119475103-46		Eye Irrit. 2, H319		
	EC: 205-500-4		STOT SE 3, H336		
	CAS: 141-78-6		EUH066		
	Index: 607-022-00-5				
1,3-Propanediol, 2-ethyl-2-	EC: 500-120-8	≥10 - ≤25	Eye Irrit. 2, H319	-	[1]
(hydroxymethyl)-, polymer with 1,	CAS: 53317-61-6		Skin Sens. 1, H317		
3-diisocyanatomethylbenzene and 2,2'-oxybis[ethanol]					
Benzene, 1,	CAS: 9017-01-0	≤10	Eye Irrit. 2, H319	-	[1]
3-diisocyanatomethyl-,			Skin Sens. 1, H317		
homopolymer					
ethyl acetate	REACH #:	≤10	Flam. Liq. 2, H225	-	[1] [2]
	01-2119475103-46		Eye Irrit. 2, H319		
	EC: 205-500-4		STOT SE 3, H336		
	CAS: 141-78-6		EUH066		
	Index: 607-022-00-5				
m-tolylidene diisocyanate	REACH #:	≤0.3	Acute Tox. 2, H330	-	[1]
	01-2119454791-34		Skin Irrit. 2, H315		
	EC: 247-722-4		Eye Irrit. 2, H319		
	CAS: 26471-62-5		Resp. Sens. 1, H334		
	Index: 615-006-00-4		Skin Sens. 1, H317		
			Carc. 2, H351		
			STOT SE 3, H335		
			Aquatic Chronic 3,		
			H412		
			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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in 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 unconscious, place in recovery position and seek medical advice.
- position and seek medical ac
- Eye contact : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

## **SECTION 4: First aid measures**

Inhalation

: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

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.

**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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Repeated or prolonged contact with irritants may cause dermatitis.

Contains Toluene diisocyanate, oligomeric reaction products with 2,2'-oxydiethanol and propylidenetrimethanol, Benzene, 1,3-diisocyanatomethyl-, homopolymer, m-tolylidene diisocyanate. May produce an allergic reaction.

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

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** 

: No specific treatment.

See toxicological information (Section 11)

## **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media

: Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray or mist.

Unsuitable extinguishing media

: Do not use water jet.

## 5.2 Special hazards arising from the substance or mixture

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## **SECTION 5: Firefighting measures**

Hazards from the substance or mixture

Hazardous thermal decomposition products

- : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen, hydrogen cyanide, monomeric isocyanates.

## 5.3 Advice for firefighters

Special protective actions for fire-fighters

Special protective equipment for fire-fighters

- : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- : Appropriate breathing apparatus may be required.

## SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## **6.2 Environmental precautions**

: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

# 6.3 Methods and materials for containment and cleaning up

: Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Place in a suitable container. The contaminated area should be cleaned immediately with a suitable decontaminant. One possible (flammable) decontaminant comprises (by volume): water (45 parts), ethanol or isopropyl alcohol (50 parts) and concentrated (d: 0,880) ammonia solution (5 parts). A non-flammable alternative is sodium carbonate (5 parts) and water (95 parts). Add the same decontaminant to the remnants and let stand for several days until no further reaction in an unsealed container. Once this stage is reached, close container and dispose of according to local regulations (see section 13).

## 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**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used.

Examination of lung function should be carried out on a regular basis on persons spraying this mixture.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

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 only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Care should be taken when re-opening partly-used containers. Precautions should be taken to minimize exposure to atmospheric humidity or water. CO<sub>2</sub> will be formed, which, in closed containers, could result in pressurization. Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

## Information on fire and explosion protection

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapors in all cases. In such circumstances, they should wear a compressed-air-fed respirator during the spraying process and until the particulate and solvent vapor concentrations have fallen below the exposure limits.

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## 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

### Notes on joint storage

Keep away from: oxidizing agents, strong alkalis, strong acids.

## Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep container tightly closed.

Keep away from sources of ignition. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

## 7.3 Specific end use(s)

solutions

Recommendations : No additional information.

Industrial sector specific : No additional information.

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## **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

## 8.1 Control parameters

## Occupational exposure limits

Product/ingredient name	Exposure limit values
	EU OEL (Europe, 12/2017). Notes: list of indicative occupational exposure limit values  STEL: 400 ppm 15 minutes.  STEL: 1468 mg/m³ 15 minutes.  TWA: 200 ppm 8 hours.  TWA: 734 mg/m³ 8 hours.

## procedures

Recommended monitoring : 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.

## **DNELs/DMELs**

Product/ingredient name	Type	Exposure	Value	Population	Effects
n-butyl acetate	DNEL	Short term	960 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Inhalation Short term Inhalation	960 mg/m³	Workers	Local
	DNEL	Long term Inhalation	480 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	480 mg/m³	Workers	Local
m-tolylidene diisocyanate	DNEL	Short term Inhalation	0.14 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	0.14 mg/m³	Workers	Local
	DNEL	Long term Inhalation	0.035 mg/ m³	Workers	Systemic
	DNEL	Long term Inhalation	0.035 mg/ m³	Workers	Local

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## **SECTION 8: Exposure controls/personal protection**

Product/ingredient name	Compartment Detail	Value	Method Detail
n-butyl acetate	Fresh water	0.18 mg/l	-
	Marine	0.018 mg/l	-
	Fresh water sediment	0.981 mg/kg	-
	Marine water sediment	0.0981 mg/kg	-
	Soil	0.0903 mg/kg	-
	Sewage Treatment Plant	35.6 mg/l	-
m-tolylidene diisocyanate	Fresh water	0.013 mg/l	-
-	Marine	0.00125 mg/l	-
	Soil	>1 mg/kg dwt	-
	Sewage Treatment Plant	>1 mg/l	-

### 8.2 Exposure controls

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this product is used.

## Examination of lung function should be carried out on a regular basis on persons spraying this mixture.

## Appropriate engineering controls

: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. Air-fed protective respiratory equipment must be worn by the spray operator, even when good ventilation is provided. In other operations, if local exhaust ventilation and good general extraction are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn. (See Occupational exposure controls.)

## **Individual protection measures**

### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## Eye/face protection

Skin protection

## **Hand protection**

: Use safety eyewear designed to protect against splash of liquids.

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

## **SECTION 8: Exposure controls/personal protection**

**Gloves** 

: For prolonged or repeated handling, use the following type of gloves:

Recommended (> 8 hours (breakthrough time)): polyvinyl alcohol (PVA),

polyethylene (PE), Viton®

May be used (4 - 8 hours (breakthrough time)): butyl rubber, nitrile rubber, neoprene Not recommended (< 1 hour (breakthrough time)): natural rubber (latex), polyvinyl

chloride (PVC)

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of

use, as included in the user's risk assessment.

**Body protection** 

: Personnel should wear antistatic clothing made of natural fibers or of high-

temperature-resistant synthetic fibers.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** 

: By spraying: air-fed respirator.

By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask. (as filter

combination A-P2)

Under cool, dry conditions, it is possible for the isocyanate to remain unreacted in the paint film for up to 30 hours after application. If dry flatting is unavoidable, air-fed

respiratory protective equipment should be used.

**Environmental exposure** 

controls

: Do not allow to enter drains or watercourses.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

**Appearance** 

Physical state : Liquid.

Color : Not available.

Odor : Not available.

Odor threshold : Not applicable.

pH : Acidic. [DIN EN 1262]

Melting point/freezing point : Not tested Initial boiling point and : 74 - 128 °C

boiling range

Flash point : Closed cup: -5°C [Pensky-Martens]

Evaporation rate : Not tested Flammability (solid, gas) : Not applicable.

**Upper/lower flammability or** 

explosive limits

: Lower: 1.2% Upper: 11.5%

**Vapor pressure** : 81.59 mm Hg (10.8515 kPa) (Highest known value: ethyl acetate)

**Vapor density** : > 1 (Air = 1) (Calculation method)

**Density** : 0.96 g/cm³ [DIN EN ISO 2811-1]

Solubility(ies) : Not tested Partition coefficient: n-octanol/ : Not tested

water

**Auto-ignition temperature** : 415 °C (Lowest known value: n-butyl acetate)

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

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## **SECTION 9: Physical and chemical properties**

**Decomposition temperature**: Not tested

Viscosity : > 13 (DIN CUP 4 MM) [DIN EN ISO 3219]

Explosive properties : Not tested

Oxidizing properties : Not tested

Particle characteristics

Median particle size : Not applicable.

#### 9.2 Other information

No additional information.

## **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** : Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions

: The product reacts slowly with water, resulting in the production of carbon dioxide. In closed containers, pressure buildup could result in distortion, expansion and, in extreme cases, bursting of the container.

10.4 Conditions to avoid : In a fire, hazardous decomposition products may be produced.

**10.5 Incompatible materials** : Keep away from: oxidizing agents, strong alkalis, strong acids, amines, alcohols, water. Uncontrolled exothermic reactions occur with amines and alcohols.

10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitization of the respiratory system, leading to an asthmatic condition, wheezing and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability. Repeated or prolonged contact with irritants may cause dermatitis.

Contains Toluene diisocyanate, oligomeric reaction products with 2,2'-oxydiethanol and propylidenetrimethanol,

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## **SECTION 11: Toxicological information**

Benzene, 1,3-diisocyanatomethyl-, homopolymer, m-tolylidene diisocyanate. May produce an allergic reaction.

## **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
n-butyl acetate	LD50 Dermal		>17600 mg/kg	-
ethyl acetate	LD50 Oral LD50 Oral	Rat Rat	10768 mg/kg 5620 mg/kg	-
ethyl acetate	LD50 Oral		5620 mg/kg	-
m-tolylidene diisocyanate	LD50 Oral	Rat	4130 mg/kg	-

**Conclusion/Summary** 

: Not available.

## **Acute toxicity estimates**

Product as-supplied

Route	ATE value
Inhalation (dusts and mists)	29.15 mg/l

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-butyl acetate	Eyes - Moderate irritant	Rabbit	-	100 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
m-tolylidene diisocyanate	Skin - Severe irritant	Rabbit	-	500 milligrams	-

**Conclusion/Summary** 

: Not available.

**Sensitization** 

Conclusion/Summary

: Not available.

**Mutagenicity** 

**Conclusion/Summary** 

: Not available.

Carcinogenicity

**Conclusion/Summary** 

: Not available.

Reproductive toxicity

**Conclusion/Summary** 

: Not available.

**Teratogenicity** 

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
n-butyl acetate ethyl acetate ethyl acetate m-tolylidene diisocyanate	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Narcotic effects Narcotic effects Respiratory tract irritation

## Specific target organ toxicity (repeated exposure)

Not available.

## **Aspiration hazard**

Not available.

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## **SECTION 11: Toxicological information**

## Potential acute health effects

**Eye contact**: Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Skin contact**: May cause an allergic skin reaction.

Ingestion : Can cause central nervous system (CNS) depression.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

wheezing and breathing difficulties

asthma

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin contact**: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

## Potential chronic health effects

General: Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

## 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

Not available.

#### 11.2.2 Other information

No additional information.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment, but contains substance(s) hazardous to the environment. See section 3 for details.

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## **SECTION 12: Ecological information**

Product/ingredient name	Result	Species	Exposure
ethyl acetate	Acute EC50 2500000 μg/l Fresh water Acute LC50 750000 μg/l Fresh water Acute LC50 154000 μg/l Fresh water Acute LC50 212500 μg/l Fresh water Chronic NOEC 2400 μg/l Fresh water Chronic NOEC 75.6 mg/l Fresh water	Algae - Selenastrum sp. Crustaceans - Gammarus pulex Daphnia - Daphnia cucullata Fish - Heteropneustes fossilis Daphnia - Daphnia magna Fish - Pimephales promelas - Embryo	96 hours 48 hours 48 hours 96 hours 21 days 32 days

**Conclusion/Summary**: Not available.

## 12.2 Persistence and degradability

## 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate	2.3	-	low
ethyl acetate	0.68	30	low
ethyl acetate	0.68	30	low
m-tolylidene diisocyanate	3.43	-	low

#### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

#### 12.5 Results of PBT and vPvB assessment

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## 12.6 Endocrine disrupting properties

Not available.

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

## **SECTION 13: Disposal considerations**

Waste disposal: 2008/98/EC

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 13.1 Waste treatment methods

#### **Product**

Methods of disposal

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

## **SECTION 13: Disposal considerations**

**Hazardous waste** 

: Yes.

**Disposal considerations** 

: Do not allow to enter drains or watercourses. Residues in empty containers should be neutralized with a decontaminant (see section 6).

Dispose of waste according to applicable legislation.

If this product is mixed with other wastes, the original waste product code may no

longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

#### **Packaging**

**Methods of disposal** 

: 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.

**Disposal considerations** 

Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Type of packaging		European waste catalogue (EWC)
CEPE Guidelines	15 01 10*	packaging containing residues of or contaminated by
		hazardous substances

### **Special precautions**

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	No.	No.	No.	No.

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

| SECTION 14: Transport information | Special provisions | Information | G40 (C) | G40

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

#### **Annex XIV**

None of the components are listed.

## Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

**Europe inventory** : Not determined. **Priority List Chemicals** : Not determined

(793/93/EEC)

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
m-tolylidene diisocyanate	Carc. 2, H351	-	-	-

#### **Seveso Directive**

This product is controlled under the Seveso Directive.

## **Named substances**

## Name

m-tolylidene diisocyanate

## **Danger criteria**

### **Category**

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

C7b: Highly flammable (R11)

## **SECTION 15: Regulatory information**

Industrial use

: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

15.2 Chemical Safety Assessment

: No Chemical Safety Assessment has been carried out.

## **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

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

Troccadic asca to acrive the on	assincation according to	Regulation (EC) No. 1272/2000 [CEP/GH3]
Classificat	ion	Justification
Flam. Liq. 2, H225 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H336		On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method
Full text of abbreviated H : statements	H225 H226 H315 H317 H319 H330 H334 H335 H335 H336 H351 H412	Highly flammable liquid and vapor. Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Harmful to aquatic life with long lasting effects.
Full text of classifications : [CLP/GHS]	Acute Tox. 2, H330 Aquatic Chronic 3, H412 Carc. 2, H351 EUH066 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Flam. Liq. 3, H226 Resp. Sens. 1, H334 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 STOT SE 3, H336	ACUTE TOXICITY (inhalation) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 3 CARCINOGENICITY - Category 2 Repeated exposure may cause skin dryness or cracking. SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 RESPIRATORY SENSITIZATION - Category 1 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Date of issue/Date of revision : 2023-03-16 Date of previous issue : No previous validation Version : 1 16/17

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

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## **SECTION 16: Other information**

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revision

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Version : 1

### **Notice to reader**

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

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