SAFETY DATA SHEET

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

1.1 Product identifier

Product name : PU TOPCOAT FOR ELECTROSTATIC - CLEAR,10 GLOSS

Product code : TZ3610/00

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

Material uses : Paint or paint related material.

: Industrial use only.

1.3 Details of the supplier of the safety data

sheet

SHERWIN-WILLIAMS Italy S.r.I. Via del Fiffo, 12 - 40065 Pianoro (BO)

Italia - C.P. 18

Cod. Fisc. e Reg. Impr. Bo 08866930152

e-mail address of person : regula

responsible for this SDS

: regulatory.SWI@sherwin.com

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : 111 (general public) /0344 892 111 (Medical professional (NHS) only)

Supplier

Telephone number : +39 051 770511

Hours of operation : Emergency contact available 24 hours a day

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. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

STOT SE 3, H335 STOT RE 2, H373

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

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

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

2.2 Label elements

Hazard pictograms







Signal word : Warning

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SECTION 2: Hazards identification

Hazard statements: Flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

Harmful if inhaled.

May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

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. Do not

breathe vapor. Wash thoroughly after handling.

Response : Get medical advice or attention if you feel unwell. IF INHALED: Call a POISON

CENTER or doctor if you feel unwell.

Storage : Not applicable.

Disposal : Not applicable.

Hazardous ingredients : Xylene, mixed isomers

Supplemental label

elements

: FOR INDUSTRIAL USE ONLY

Annex XVII - Restrictions on the manufacture, placing on the market and

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

articles

Special packaging requirements

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 in classification

: None known.

: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
Xylene, mixed isomers	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥25 - ≤50	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304	[1] [2]
n-Butyl Acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≤10	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
Ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	<10	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]

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SECTION 3: Composition/information on ingredients

Methyl Isobutyl Ketone	REACH #:	≤5	Flam. Liq. 2, H225	[1] [2]
	01-2119473980-30		Acute Tox. 4, H332	
	EC: 203-550-1		Eye Irrit. 2, H319	
	CAS: 108-10-1		STOT SE 3, H335	
	Index: 606-004-00-4		EUH066	
Cyclohexanone	REACH #:	<3	Flam. Liq. 3, H226	[1] [2]
	01-2119453616-35		Acute Tox. 4, H302	
	EC: 203-631-1		Acute Tox. 4, H312	
	CAS: 108-94-1		Acute Tox. 4, H332	
	Index: 606-010-00-7		Skin Irrit. 2, H315	
			Eye Dam. 1, H318	
Isobutyl Acetate	REACH #:	≤2.3	Flam. Liq. 2, H225	[1] [2]
	01-2119488971-22		STOT SE 3, H336	
	EC: 203-745-1		EUH066	
	CAS: 110-19-0			
	Index: 607-026-00-7			
2-Ethyl-2-	REACH #:	≤0.3	Repr. 2, H361	[1]
(hydroxymethyl)	01-2119486799-10			
-1,3-propanediol	EC: 201-074-9			
	CAS: 77-99-6			
			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 or vPvBs 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
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

General	: Ir	า all ca	ses of	doubt,	or when s	symptoms	persist, s	eek medica	ıl atten	ition. N	ever give

anything by mouth to an unconscious person. If unconscious, place in recovery

position and seek medical advice.

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.

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.

4.2 Most important symptoms and effects, both acute and delayed

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SECTION 4: First aid measures

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. 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.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

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, carbon dioxide, powders

Unsuitable extinguishing

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous combustion products

: 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

: Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters

: Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

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.

Keep unnecessary and unprotected personnel from entering.

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".

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SECTION 6: Accidental release measures

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.

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_2 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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SECTION 7: Handling and storage

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.

Contaminated absorbent material may pose the same hazard as the spilled product.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

Good housekeeping standards, regular safe removal of waste materials and regular maintenance of spray booth filters will minimise the risks of spontaneous combustion and other fire hazards.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations.

SECTION 8: Exposure controls/personal protection

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).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name

Exposure limit values

X land mind in a second	FILMO(2005 MIFL - (United Mirandam (UNIC) 0(2040) About had
Xylene, mixed isomers	EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed
	through skin.
	STEL: 441 mg/m³ 15 minutes.
	TWA: 50 ppm 8 hours.
	TWA: 220 mg/m³ 8 hours.
	STEL: 100 ppm 15 minutes.
n-Butyl Acetate	EH40/2005 WELs (United Kingdom (UK), 8/2018).
	STEL: 966 mg/m³ 15 minutes.
	STEL: 200 ppm 15 minutes.
	TWA: 724 mg/m³ 8 hours.
	TWA: 150 ppm 8 hours.
Ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed
	through skin.
	STEL: 552 mg/m³ 15 minutes.
	STEL: 125 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
	TWA: 441 mg/m³ 8 hours.
Methyl Isobutyl Ketone	EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed
	through skin.
	STEL: 416 mg/m³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 208 mg/m ³ 8 hours.
	TWA: 50 ppm 8 hours.
Cyclohexanone	EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed
l ⁻	

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SECTION 8: Exposure controls/personal protection

through skin.

STEL: 20 ppm 15 minutes.
TWA: 10 ppm 8 hours.

Isobutyl Acetate

EH40/2005 WELs (United Kingdom (UK), 8/2018).

STEL: 903 mg/m³ 15 minutes.
STEL: 187 ppm 15 minutes.
TWA: 724 mg/m³ 8 hours.
TWA: 150 ppm 8 hours.

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.
- : Regular monitoring of all work areas should be carried out at all times, including areas that may not be equally ventilated.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
Xylene, mixed isomers	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	108 mg/kg bw/day	General population [Human via the environment]	Systemic
	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	289 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	289 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	14.8 mg/m³	General population [Human via the environment]	Systemic
	DNEL	Short term Inhalation	174 mg/m³	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	174 mg/m³	General population [Consumers]	Local
n-Butyl Acetate	DNEL	Short term Inhalation	960 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	960 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	480 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	480 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	859.7 mg/ m³	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	859.7 mg/ m³	General population	Local

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					,
	51151			[Consumers]	
	DNEL	Long term	102.34 mg/	General	Systemic
		Inhalation	m³	population	
				[Consumers]	
	DNEL	Long term	102.34 mg/	General	Local
		Inhalation	m³	population	
				[Consumers]	
Methyl Isobutyl Ketone	DNEL	Short term	208 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Short term	208 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Long term	83 mg/m³	Workers	Systemic
		Inhalation	55g/		, , , , , , , , , , , , , , , , , , , ,
	DNEL	Long term	83 mg/m³	Workers	Local
	DIVLE	Inhalation	oo mg/m	VVOIROIS	Local
	DNEL	Long term Dermal	11.8 mg/	Workers	Systemic
	DIVLE	Long term berman	kg bw/day	VVOIRCIS	Cysternic
	DNEL	Short term	155.2 mg/	General	Systemic
	DIVLL	Inhalation	m ³	population	Systemic
		IIIIaiauoii	1111		
	DAIEI	Ola a ut ta una	455 0	[Consumers]	1 1
	DNEL	Short term	155.2 mg/	General	Local
		Inhalation	m³	population	
				[Consumers]	
	DNEL	Long term	14.7 mg/m ³	General	Systemic
		Inhalation		population	
				[Consumers]	
	DNEL	Long term	14.7 mg/m ³	General	Local
		Inhalation		population	
				[Consumers]	
	DNEL	Long term Dermal	4.2 mg/kg	General	Systemic
			bw/day	population	
				[Consumers]	
	DNEL	Long term Oral	4.2 mg/kg	General	Systemic
			bw/day	population	
				[Consumers]	
				[

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Xylene, mixed isomers	Fresh water	0.327 mg/l	-
	Marine water	0.327 mg/l	-
	Fresh water sediment	12.46 mg/l	-
	Sewage Treatment Plant	6.58 mg/l	-
	Soil	2.31 mg/kg	-
	Marine water sediment	12.46 mg/l	-
n-Butyl Acetate	Fresh water	0.18 mg/l	-
	Marine water	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	-
Methyl Isobutyl Ketone	Fresh water	0.6 mg/l	-
	Marine water	0.06 mg/l	-
	Sewage Treatment Plant	27.5 mg/l	-
	Fresh water sediment	8.27 mg/kg dwt	-
	Marine water sediment	0.83 mg/kg dwt	-
	Soil	1.3 mg/kg dwt	-

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SECTION 8: Exposure controls/personal protection

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.)
- : Users are advised to consider national Occupational Exposure Limits or other equivalent values.

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. 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 Gloves

- : Use safety eyewear designed to protect against splash of liquids.
- : Wear suitable gloves tested to EN374.
- : Gloves for short term exposure/splash protection (less than 10 min): Nitrile >0.35 mm

Gloves for splash protection need to be changed immediately when in contact with chemicals.

For long term exposure or spills (breakthrough time >480 min): Use PE laminate gloves as under gloves.

Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing.

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.

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.
- Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

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SECTION 8: Exposure controls/personal protection

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.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved Respiratory protection

standard if a risk assessment indicates this is necessary. 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.

Environmental exposure

controls

: Do not allow to enter drains or watercourses.

Before use of this material please refer to the Exposure Scenario(s) if attached for the specific end use, control measures and additional PPE considerations. 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Color : Not available. Odor Characteristic. Odor threshold : Not available.

: Not relevant/applicable due to nature of the product. pН : Not relevant/applicable due to nature of the product.

Melting point/freezing point

Initial boiling point and

boiling range

: 110°C

: Closed cup: 24°C [Pensky-Martens Closed Cup] Flash point

: 1.62 (butyl acetate = 1) Evaporation rate

Flammability (solid, gas) : Not relevant/applicable due to nature of the product.

Upper/lower flammability or

explosive limits

: LEL: 1% (Xylene, mixed isomers)

UEL: 8.1% (Cyclohexanone)

: 2.1 kPa [at 20°C] Vapor pressure 3.4 [Air = 1]Vapor density

Relative density : 1

Solubility(ies) : Not relevant/applicable due to nature of the product. Partition coefficient: n-octanol/ : Not relevant/applicable due to nature of the product.

water

Auto-ignition temperature Decomposition temperature : Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.

: Kinematic (40°C): >0.205 cm²/s Viscosity

Explosive properties : Under normal conditions of storage and use, hazardous reactions will not occur. Oxidizing properties : Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 10: Stability and reactivity

10.1 Reactivity : The product reacts slowly with water, resulting in the production of carbon dioxide.

10.2 Chemical stability : Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions

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SECTION 10: Stability and reactivity

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

: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen, hydrogen cyanide, monomeric

isocyanates.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. 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.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Xylene, mixed isomers	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
n-Butyl Acetate	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
Ethylbenzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Methyl Isobutyl Ketone	LD50 Oral	Rat	2080 mg/kg	-
Cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
	LD50 Oral	Rat	1800 mg/kg	-
Isobutyl Acetate	LD50 Dermal	Rabbit	>17400 mg/kg	-
•	LD50 Oral	Rat	13400 mg/kg	-
2-Ethyl-2-(hydroxymethyl) -1,3-propanediol	LD50 Oral	Rat	14000 mg/kg	-

Acute toxicity estimates

Route	ATE value
Oral	72000 mg/kg
Dermal	3098.07 mg/kg
Inhalation (gases)	14464.05 ppm
Inhalation (vapors)	125.86 mg/l

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SECTION 11: Toxicological information

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5	-
				mg	
	Skin - Mild irritant	Rat	-	8 hours 60 UI	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Moderate irritant	Rabbit	-	100 %	-
n-Butyl Acetate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15	-
				mg	
Methyl Isobutyl Ketone	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				UI	
	Eyes - Severe irritant	Rabbit	-	40 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
Cyclohexanone	Eyes - Severe irritant	Rabbit	-	24 hours 250	-
		5		ug	
	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Human	-	48 hours 50	-
		D 11.7		%	
La about I A a state	Skin - Mild irritant	Rabbit	-	500 mg	-
Isobutyl Acetate	Eyes - Moderate irritant	Rabbit	-	24 hours 500	-
	Olice Mild instant	Dabbit		mg	
	Skin - Mild irritant	Rabbit	-	500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	

Conclusion/Summary

: Not available.

Sensitization

No data available

Conclusion/Summary

: Not available.

Mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 3	-	Respiratory tract irritation
n-Butyl Acetate	Category 3	-	Narcotic effects
Methyl Isobutyl Ketone	Category 3	-	Respiratory tract irritation
Isobutyl Acetate	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

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SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
Xylene, mixed isomers	Category 2	-	-
Ethylbenzene	Category 2		hearing organs

Aspiration hazard

Product/ingredient name	Result
Xylene, mixed isomers Ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Other information: Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
Xylene, mixed isomers	Acute LC50 8500 μg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
n-Butyl Acetate	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
_	Acute LC50 18000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Ethylbenzene	Acute EC50 4600 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 μg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 6.53 mg/l Marine water	Crustaceans - Artemia sp Nauplii	48 hours
	Acute EC50 2.93 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Methyl Isobutyl Ketone	Acute LC50 505000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 78 mg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 168 mg/l Fresh water	Fish - Pimephales promelas - Embryo	33 days
Cyclohexanone	Acute EC50 32.9 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Acute LC50 527000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic EC10 3.56 mg/l Fresh water	Algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
2-Ethyl-2-(hydroxymethyl) -1,3-propanediol	Acute EC50 13000000 μg/l Fresh water		48 hours
	Acute LC50 14400000 μg/l Marine water	Fish - Cyprinodon variegatus	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
No data available				

Conclusion/Summary: Not available.

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SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Xylene, mixed isomers	-	-	Readily
n-Butyl Acetate	-	-	Readily
Ethylbenzene	-	-	Readily
Methyl Isobutyl Ketone	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Xylene, mixed isomers 2-Ethyl-2-(hydroxymethyl) -1,3-propanediol	-	8.1 to 25.9 <1	low low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility

: Not available.

12.5 Results of PBT and vPvB assessment

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

12.6 Other adverse effects

: No known significant effects or critical hazards.

: Avoid dispersal of spilled material and runoff and contact with soil, waterways,

drains and sewers.

SECTION 13: Disposal considerations

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.

Hazardous waste

: Yes.

European waste catalogue (EWC)

: waste isocyanates 08 05 01*

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 according to all federal, state and local applicable regulations.

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.

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.

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SECTION 13: Disposal considerations

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

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	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT
14.3 Transport Hazard Class(es)/ Label(s)	3	3	3
14.4 Packing group	III	III	III
14.5 Environmental hazards	No.	No.	No.
Additional information	Tunnel code D/E	Emergency schedules F-E, S-E	-

user

14.6 Special precautions for : 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 Transport in bulk according to IMO instruments

: Not applicable.

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea. air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

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)

<u>Annex XIV - List of substances subject to authorization</u>

Annex XIV

None of the components are listed.

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SECTION 15: Regulatory information

Annex XVII - Restrictions : Not applicable.

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

VOC content (2010/75/EU) : 53 w/w

533 **g/l**

Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

National regulations

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

N/A = Not available

Key literature references and sources for data

: Regulation (EC) No. 1272/2008 [CLP]

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road

IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods

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

Commission Regulation (EU) 2015/830

Directive 2012/18/EU, and relative amendments & additions Directive 2008/98/EC, and relative amendments & additions Directive 2009/161/EU, and relative amendments & additions

CEPE Guidelines

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

Classification	Justification
	On basis of test data
,	Calculation method Calculation method
, , , , , , , , , , , , , , , , , , , ,	Calculation method
, , , , , , , , , , , , , , , , , , , ,	Calculation method Calculation method

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SECTION 16: Other information

Full text of abbreviated H	: H225	Highly flammable liquid and vapor.
statements	H226	Flammable liquid and vapor.
	H302	Harmful if swallowed.
	H304	May be fatal if swallowed and enters airways.
	H312	Harmful in contact with skin.
	H315	Causes skin irritation.
	H318	Causes serious eye damage.
	H319	Causes serious eye irritation.
	H332	Harmful if inhaled.
	H335	May cause respiratory irritation.
	H336	May cause drowsiness or dizziness.
	H361	Suspected of damaging fertility or the unborn child.
	H373	May cause damage to organs through prolonged or repeated exposure.
	H412	Harmful to aquatic life with long lasting effects.
	EUH066	Repeated exposure may cause skin dryness or cracking.
	A (T 4	4 OLUTE TO VIOLETY 0. 1

Full text of classifications [CLP/GHS]

: Acute Tox. 4 **ACUTE TOXICITY - Category 4** AQUATIC HAZARD (LONG-TERM) - Category 3 Aquatic Chronic 3 Asp. Tox. 1 ASPIRATION HAZARD - Category 1 Eye Dam. 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 Eve Irrit. 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 Flam. Liq. 2 FLAMMABLE LIQUIDS - Category 2 Flam. Liq. 3 FLAMMABLE LIQUIDS - Category 3 TOXIC TO REPRODUCTION - Category 2 Repr. 2 Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2 STOT RE 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE

EXPOSURE) - Category 3

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: If there is no previous validation date please contact your supplier for more

information.

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Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

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