

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

KMK 4125 FAST HARDENER



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

1.1 Product identifier: KMK 4125 FAST HARDENER

Other means of identification:

UFI: MKH4-CP5N-000D-SX6N

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

Relevant uses: Hardener for coatings. For professional users/industrial user only.

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Kimakem srl

Via Don G. Fortuna 82

36050 Monteviale - Vicenza - Italia

Phone: +39 0444 1220020 info@kimakem.com

1.4 Emergency telephone number: +39 0444 1220020 (Monday to Friday 8:30 -17:30 GMT +1:00)

SECTION 2: HAZARDS IDENTIFICATION **

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Acute Tox. 4: Acute inhalation toxicity, Category 4, H332

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412

Asp. Tox. 1: Aspiration hazard, Category 1, H304

Eye Irrit. 2: Eye irritation, Category 2, H319

Flam. Liq. 3: Flammable liquids, Category 3, H226

Skin Irrit. 2: Skin irritation, Category 2, H315

Skin Sens. 1: Sensitisation, skin, Category 1, H317

STOT RE 2: Specific target organ toxicity — Repeated exposure, Hazard Category 2 (Oral), H373

STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336

STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger







Hazard statements:

H226 - Flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H335 - May cause respiratory irritation.

H336 - May cause drowsiness or dizziness.

H373 - May cause damage to organs through prolonged or repeated exposure (Oral).

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

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SECTION 2: HAZARDS IDENTIFICATION ** (continued)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P370+P378: In case of fire: Use Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC) to extinguish.

P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

Supplementary information:

EUH204: Contains isocyanates. May produce an allergic reaction.

Substances that contribute to the classification

Hexamethylene diisocyanate, oligomers (<0.1 % O=C=N-R-N=C=O); Xylene; N-butyl acetate; 2-methoxy-1-methylethyl acetate

UFI: MKH4-CP5N-000D-SX6N

Other hazards: 2.3

Product does not meet PBT/vPvB criteria

Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 **Substance:**

Non-applicable

3.2 Mixture:

Chemical description: polyisocyanate

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

	Identification		Chemical name/Classification		Concentration		
CAS:	28182-81-2	Hexamethylene diiso	Hexamethylene diisocyanate, oligomers (<0.1 % O=C=N-R-N=C=O)(1) Self-classified				
EC: Index: REACH:	931-274-8 Non-applicable 01-2119485796-17- XXXX	Regulation 1272/2008	Acute Tox. 4: H332; Skin Sens. 1: H317; STOT SE 3: H335 - Warning		25 - <50 %		
CAS:	1330-20-7	Xylene ⁽¹⁾	Sel	lf-classified			
EC: 215-535-7 Index: 601-022-00-9 REACH: 01-2119488216-32- XXXX		Regulation 1272/2008	Acute Tox. 4: H312+H332; Aquatic Chronic 3: H412; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H335 - Danger	1 4	10 - <25 %		
CAS:	123-86-4	N-butyl acetate(1)	AT	P CLP00			
Index: 60 REACH: 01	204-658-1 607-025-00-1 01-2119485493-29- XXXX	Regulation 1272/2008	Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Warning	(1)	10 - <25 %		
CAS:	108-65-6	2-methoxy-1-methy	lethyl acetate ⁽¹⁾ Sel	lf-classified			
Index: 60 REACH: 01	203-603-9 607-195-00-7 01-2119475791-29- XXXX	Regulation 1272/2008	Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	1 3	10 - <25 %		
CAS:	100-41-4	Ethylbenzene(1)	Sel	f-classified			
	202-849-4 601-023-00-4 01-2119489370-35- XXXX	Regulation 1272/2008	Acute Tox. 4: H332; Aquatic Chronic 3: H412; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT RE 2: H373 - Danger	<u>()</u>	5 - <10 %		
CAS:	64742-95-6	Hydrocarbons, C9, aromatics ⁽¹⁾ Self-classified					
EC: Index: REACH:	Non-applicable Non-applicable Non-applicable	Regulation 1272/2008	Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT SE 3: H335; STOT SE 3: H336; EUH066 - Danger		1 - <2,5 %		

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Acu	Acute toxicity		
Hexamethylene diisocyanate, oligomers (<0.1 % O=C=N-R-N=C=O)	LD50 oral	Not relevant		
CAS: 28182-81-2	LD50 dermal	Not relevant		
EC: 931-274-8	LC50 inhalation	11 mg/L (ATEi)		
Xylene	LD50 oral	Not relevant		
CAS: 1330-20-7	LD50 dermal	1100 mg/kg	Rat	
EC: 215-535-7	LC50 inhalation	11 mg/L (ATEi)		

SECTION 4: FIRST AID MEASURES

4.1 **Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Not relevant

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media:

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

Unsuitable extinguishing media:

Water jet

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:



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SECTION 5: FIREFIGHTING MEASURES (continued)

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

 $\ensuremath{\text{D.-}}$ Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Specific storage requirements

 $\begin{array}{ll} \mbox{Minimum Temp.:} & 5 \mbox{ °C} \\ \mbox{Maximum Temp.:} & 30 \mbox{ °C} \end{array}$

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5



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SECTION 7: HANDLING AND STORAGE (continued)

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
Xylene (1)	IOELV (8h)	50 ppm	221 mg/m ³
CAS: 1330-20-7 EC: 215-535-7	IOELV (STEL)	100 ppm	442 mg/m ³
N-butyl acetate	IOELV (8h)	50 ppm	241 mg/m ³
CAS: 123-86-4 EC: 204-658-1	IOELV (STEL)	150 ppm	723 mg/m ³
2-methoxy-1-methylethyl acetate (1)	IOELV (8h)	50 ppm	275 mg/m ³
CAS: 108-65-6 EC: 203-603-9	IOELV (STEL)	100 ppm	550 mg/m ³
Ethylbenzene (1)	IOELV (8h)	100 ppm	442 mg/m ³
CAS: 100-41-4 EC: 202-849-4	IOELV (STEL)	200 ppm	884 mg/m ³

⁽¹⁾ Skin

DNEL (Workers):

		Short e	exposure	Long e	xposure
Identification		Systemic	Local	Systemic	Local
Hexamethylene diisocyanate, oligomers (<0.1 % O=C=N-R-N=C=O)	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 28182-81-2	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 931-274-8	Inhalation	Not relevant	1 mg/m³	Not relevant	0,5 mg/m ³
Xylene	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 1330-20-7	Dermal	Not relevant	Not relevant	212 mg/kg	Not relevant
EC: 215-535-7	Inhalation	442 mg/m ³	442 mg/m ³	221 mg/m ³	221 mg/m ³
N-butyl acetate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 123-86-4	Dermal	11 mg/kg	Not relevant	11 mg/kg	Not relevant
EC: 204-658-1	Inhalation	600 mg/m ³	600 mg/m ³	300 mg/m ³	300 mg/m ³
2-methoxy-1-methylethyl acetate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 108-65-6	Dermal	Not relevant	Not relevant	796 mg/kg	Not relevant
EC: 203-603-9	Inhalation	Not relevant	550 mg/m ³	275 mg/m ³	Not relevant
Ethylbenzene	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 100-41-4	Dermal	Not relevant	Not relevant	180 mg/kg	Not relevant
EC: 202-849-4	Inhalation	Not relevant	293 mg/m ³	77 mg/m³	Not relevant
Hydrocarbons, C9, aromatics	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 64742-95-6	Dermal	Not relevant	Not relevant	25 mg/kg	Not relevant
EC: Non-applicable	Inhalation	Not relevant	Not relevant	150 mg/m ³	Not relevant

DNEL (General population):

		Short e	xposure	Long exposure	
Identification		Systemic	Local	Systemic	Local
Xylene	Oral	Not relevant	Not relevant	12,5 mg/kg	Not relevant
CAS: 1330-20-7	Dermal	Not relevant	Not relevant	125 mg/kg	Not relevant
EC: 215-535-7	Inhalation	260 mg/m ³	260 mg/m ³	65,3 mg/m ³	65,3 mg/m ³
N-butyl acetate	Oral	2 mg/kg	Not relevant	2 mg/kg	Not relevant
CAS: 123-86-4	Dermal	6 mg/kg	Not relevant	6 mg/kg	Not relevant
EC: 204-658-1	Inhalation	300 mg/m ³	300 mg/m ³	35,7 mg/m ³	35,7 mg/m ³

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

		Short e	exposure	Long exposure	
Identification		Systemic	Local	Systemic	Local
2-methoxy-1-methylethyl acetate	Oral	Not relevant	Not relevant	36 mg/kg	Not relevant
CAS: 108-65-6	Dermal	Not relevant	Not relevant	320 mg/kg	Not relevant
EC: 203-603-9	Inhalation	Not relevant	Not relevant	33 mg/m ³	33 mg/m ³
Ethylbenzene	Oral	Not relevant	Not relevant	1,6 mg/kg	Not relevant
CAS: 100-41-4	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 202-849-4	Inhalation	Not relevant	Not relevant	15 mg/m ³	Not relevant
Hydrocarbons, C9, aromatics	Oral	Not relevant	Not relevant	11 mg/kg	Not relevant
CAS: 64742-95-6	Dermal	Not relevant	Not relevant	11 mg/kg	Not relevant
EC: Non-applicable	Inhalation	Not relevant	Not relevant	32 mg/m ³	Not relevant

PNEC:

Identification				
Hexamethylene diisocyanate, oligomers ($<$ 0.1 % O=C=N-R -N=C=O)	STP	88 mg/L	Fresh water	0,127 mg/L
CAS: 28182-81-2	Soil	53183 mg/kg	Marine water	0,013 mg/L
EC: 931-274-8	Intermittent	1,27 mg/L	Sediment (Fresh water)	266701 mg/kg
	Oral	Not relevant	Sediment (Marine water)	26670 mg/kg
Xylene	STP	6,58 mg/L	Fresh water	0,327 mg/L
CAS: 1330-20-7	Soil	2,31 mg/kg	Marine water	0,327 mg/L
EC: 215-535-7	Intermittent	0,327 mg/L	Sediment (Fresh water)	12,46 mg/kg
	Oral	Not relevant	Sediment (Marine water)	12,46 mg/kg
N-butyl acetate	STP	35,6 mg/L	Fresh water	0,18 mg/L
CAS: 123-86-4	Soil	0,09 mg/kg	Marine water	0,018 mg/L
EC: 204-658-1	Intermittent	0,36 mg/L	Sediment (Fresh water)	0,981 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,098 mg/kg
2-methoxy-1-methylethyl acetate	STP	100 mg/L	Fresh water	0,635 mg/L
CAS: 108-65-6	Soil	0,29 mg/kg	Marine water	0,064 mg/L
EC: 203-603-9	Intermittent	6,35 mg/L	Sediment (Fresh water)	3,29 mg/kg
	Oral	Not relevant	Sediment (Marine water)	0,329 mg/kg
Ethylbenzene	STP	9,6 mg/L	Fresh water	0,1 mg/L
CAS: 100-41-4	Soil	2,68 mg/kg	Marine water	0,01 mg/L
EC: 202-849-4	Intermittent	0,1 mg/L	Sediment (Fresh water)	13,7 mg/kg
	Oral	0,02 g/kg	Sediment (Marine water)	1,37 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory respiratory tract protection	Filter mask for gases and vapours	CAT III	EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory hand protection	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)	CAT III	EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Panoramic glasses against splash/projections.	CATII	EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory complete body protection	Antistatic and fireproof protective clothing	CAT III	EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2002 EN ISO 14116:2015 EN 1149-5:2018	Limited protection against flames.
Mandatory foot protection	Safety footwear with antistatic and heat resistant properties	CAT III	EN ISO 13287:2020 EN ISO 20345:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
+	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	- ((((((((((DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
Emergency shower		Eyewash stations	

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

56,23 % weight V.O.C. (Supply):

V.O.C. density at 20 °C: 561,16 kg/m³ (561,16 g/L)

Average carbon number: 7,07

Average molecular weight: 115,18 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C: Liquid Appearance: Fluid Colour: Colourless Odour: Characteristic Odour threshold: Not relevant *

Volatility:

Boiling point at atmospheric pressure: 126 - 561 °C Vapour pressure at 20 °C: 819 Pa

Vapour pressure at 50 °C: 4280,7 Pa (4,28 kPa)

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Evaporation rate at 20 °C: Not relevant *

Product description:

Density at 20 °C: 998 kg/m³
Relative density at 20 °C: Not relevant *

Dynamic viscosity at 20 °C: 28 cP

Kinematic viscosity at 20 °C: Not relevant * Kinematic viscosity at 40 °C: 20,4 mm²/s Concentration: Not relevant * pH: Not relevant * Vapour density at 20 °C: Not relevant * Partition coefficient n-octanol/water 20 °C: Not relevant * Solubility in water at 20 °C: Not relevant * Solubility properties: **Immiscible** Decomposition temperature: Not relevant *

Flammability:

Flash Point: 28 °C

Flammability (solid, gas):

Autoignition temperature:

Lower flammability limit:

Upper flammability limit:

Not available

Not available

Particle characteristics:

Melting point/freezing point:

Median equivalent diameter: Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:

Oxidising properties:

Not relevant *

Corrosive to metals:

Not relevant *

Not relevant *

Not relevant *

Aerosols-total percentage (by mass) of flammable

Not relevant *

components:

Other safety characteristics:

Surface tension at 20 °C:

Not relevant *

Not relevant *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

Not relevant *

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

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SECTION 10: STABILITY AND REACTIVITY (continued)

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others	
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases	

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

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

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

- A- Ingestion (acute effect):
 - Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for consumption. For more information see section 3
 - Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- B- Inhalation (acute effect):
 - Acute toxicity: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
 - Corrosivity/Irritability: Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Produces skin inflammation.
 - Contact with the eyes: Produces eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
 - IARC: Hydrocarbons, C9, aromatics (3); Xylene (3); Ethylbenzene (2B)
 - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
 - Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- E- Sensitizing effects:
 - Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
 - Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.
- F- Specific target organ toxicity (STOT) single exposure:

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
 - Skin: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
- H- Aspiration hazard:

May be fatal if swallowed and enters airways.

Other information:

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!>





Not relevant

Specific toxicology information on the substances:

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	А	cute toxicity	Genus
N-butyl acetate	LD50 oral	12789 mg/kg	Rat
CAS: 123-86-4	LD50 dermal	14112 mg/kg	Rabbit
EC: 204-658-1	LC50 inhalation	23,4 mg/L (4 h)	Rat
Hexamethylene diisocyanate, oligomers (<0.1 % O=C=N-R-N=C=O)	LD50 oral	2660 mg/kg	Rat
CAS: 28182-81-2	LD50 dermal	>2000 mg/kg	
EC: 931-274-8	LC50 inhalation	11 mg/L (ATEi)	
Hydrocarbons, C9, aromatics	LD50 oral	>2000 mg/kg	
CAS: 64742-95-6	LD50 dermal	>2000 mg/kg	
EC: Non-applicable	LC50 inhalation	>20 mg/L	
2-methoxy-1-methylethyl acetate	LD50 oral	8532 mg/kg	Rat
CAS: 108-65-6	LD50 dermal	>5000 mg/kg	Rat
EC: 203-603-9	LC50 inhalation	30 mg/L (4 h)	Rat
Xylene	LD50 oral	2100 mg/kg	Rat
CAS: 1330-20-7	LD50 dermal	1100 mg/kg (ATEi)	Rat
EC: 215-535-7	LC50 inhalation	11 mg/L (ATEi)	
Ethylbenzene	LD50 oral	3500 mg/kg	Rat
CAS: 100-41-4	LD50 dermal	15354 mg/kg	Rabbit
EC: 202-849-4	LC50 inhalation	17,2 mg/L (4 h)	Rat

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

Other information

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available Harmful to aquatic life with long lasting effects.

12.1 Toxicity:

Acute toxicity:

Identification		Concentration	Species	Genus
Hexamethylene diisocyanate, oligomers (<0.1 % O=C=N-R-N=C=O)	LC50	Not relevant		
CAS: 28182-81-2	EC50	Not relevant		
EC: 931-274-8	EC50	1000 mg/L (72 h)	Scenedesmus subspicatus	Algae
Xylene	LC50	>10 - 100 mg/L (96 h)		Fish
CAS: 1330-20-7	EC50	>10 - 100 mg/L (48 h)		Crustacean
EC: 215-535-7	EC50	>10 - 100 mg/L (72 h)		Algae
N-butyl acetate	LC50	Not relevant		
CAS: 123-86-4	EC50	Not relevant		
EC: 204-658-1	EC50	675 mg/L (72 h)	Scenedesmus subspicatus	Algae
2-methoxy-1-methylethyl acetate	LC50	161 mg/L (96 h)	Pimephales promelas	Fish
CAS: 108-65-6	EC50	481 mg/L (48 h)	Daphnia sp.	Crustacean
EC: 203-603-9	EC50	Not relevant		
Ethylbenzene	LC50	42,3 mg/L (96 h)	Pimephales promelas	Fish
CAS: 100-41-4	EC50	75 mg/L (48 h)	Daphnia magna	Crustacean
EC: 202-849-4	EC50	63 mg/L (3 h)	Chlorella vulgaris	Algae

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification		Concentration	Species	Genus
Hydrocarbons, C9, aromatics	LC50	>1 - 10 mg/L (96 h)		Fish
CAS: 64742-95-6	EC50	>1 - 10 mg/L (48 h)		Crustacean
EC: Non-applicable	EC50	>1 - 10 mg/L (72 h)		Algae

Chronic toxicity:

Identification		Concentration	Species	Genus
Xylene	NOEC	1,3 mg/L	Oncorhynchus mykiss	Fish
CAS: 1330-20-7 EC: 215-535-7	NOEC	1,17 mg/L	Ceriodaphnia dubia	Crustacean
N-butyl acetate	NOEC	Not relevant		
CAS: 123-86-4 EC: 204-658-1	NOEC	23,2 mg/L	Daphnia magna	Crustacean
2-methoxy-1-methylethyl acetate	NOEC	47,5 mg/L	Oryzias latipes	Fish
CAS: 108-65-6 EC: 203-603-9	NOEC	100 mg/L	Daphnia magna	Crustacean
Ethylbenzene	NOEC	Not relevant		
CAS: 100-41-4 EC: 202-849-4	NOEC	0,96 mg/L	Ceriodaphnia dubia	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradab	ility
Xylene	BOD5	Not relevant	Concentration	Not relevant
CAS: 1330-20-7	COD	Not relevant	Period	28 days
EC: 215-535-7	BOD5/COD	Not relevant	% Biodegradable	88 %
N-butyl acetate	BOD5	Not relevant	Concentration	Not relevant
CAS: 123-86-4	COD	Not relevant	Period	5 days
EC: 204-658-1	BOD5/COD	Not relevant	% Biodegradable	84 %
2-methoxy-1-methylethyl acetate	BOD5	Not relevant	Concentration	785 mg/L
CAS: 108-65-6	COD	Not relevant	Period	8 days
EC: 203-603-9	BOD5/COD	Not relevant	% Biodegradable	100 %
Ethylbenzene	BOD5	Not relevant	Concentration	100 mg/L
CAS: 100-41-4	COD	Not relevant	Period	14 days
EC: 202-849-4	BOD5/COD	Not relevant	% Biodegradable	90 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Xylene	BCF	9
CAS: 1330-20-7	Pow Log	2.77
EC: 215-535-7	Potential	Low
N-butyl acetate	BCF	4
CAS: 123-86-4	Pow Log	1.78
EC: 204-658-1	Potential	Low
2-methoxy-1-methylethyl acetate	BCF	1
CAS: 108-65-6	Pow Log	0.43
EC: 203-603-9	Potential	Low
Ethylbenzene	BCF	1
CAS: 100-41-4	Pow Log	3.15
EC: 202-849-4	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volati	ility
Xylene	Koc	202	Henry	524,86 Pa·m³/mol
CAS: 1330-20-7	Conclusion	Moderate	Dry soil	Yes
EC: 215-535-7	Surface tension	Not relevant	Moist soil	Yes
N-butyl acetate	Koc	Not relevant	Henry	Not relevant
CAS: 123-86-4	Conclusion	Not relevant	Dry soil	Not relevant
EC: 204-658-1	Surface tension	2,478E-2 N/m (25 °C)	Moist soil	Not relevant

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volat	ility
Ethylbenzene	Koc	520	Henry	798,44 Pa·m³/mol
CAS: 100-41-4	Conclusion	Moderate	Dry soil	Yes
EC: 202-849-4	Surface tension	2,859E-2 N/m (25 °C)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	Hazardous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP3 Flammable, HP6 Acute Toxicity, HP13 Sensitising, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2023 and RID 2023:

3

14.1 UN number or ID number: UN1263

14.2 UN proper shipping name: PAINT RELATED MATERIAL

 14.3
 Transport hazard class(es):
 3

 Labels:
 3

 14.4
 Packing group:
 III

14.4 Packing group: III14.5 Environmental hazards: No14.6 Special precautions for user

Special regulations: 163, 367, 650
Tunnel restriction code: D/E

Tunnel restriction code: D/E
Physico-Chemical properties: see section 9

Limited quantities: 5 L

14.7 Maritime transport in bulk

according to IMO instruments:

Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 41-22:

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SECTION 14: TRANSPORT INFORMATION (continued)



14.1 UN number or ID number: UN1263

14.2 UN proper shipping name: PAINT RELATED MATERIAL

14.3 Transport hazard class(es): Labels: 3

14.4 Packing group: III 14.5 Marine pollutant:

14.6 Special precautions for user

Special regulations: 163, 223, 955, 367

EmS Codes: F-E, S-E Physico-Chemical properties: see section 9

Limited quantities:

Segregation group: Not relevant 14.7 Maritime transport in bulk

according to IMO instruments:

Not relevant

Transport of dangerous goods by air:

With regard to IATA/ICAO 2024:



14.1 UN number or ID number: UN1263

14.2 UN proper shipping name: PAINT RELATED MATERIAL

14.3 Transport hazard class(es): Labels: 3 14.4 Packing group: III

14.5 Environmental hazards: 14.6 Special precautions for user

Physico-Chemical properties: see section 9 14.7 Maritime transport in bulk

> according to IMO instruments:

Not relevant

No

SECTION 15: REGULATORY INFORMATION

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

- Article 95, REGULATION (EU) No 528/2012: Not relevant
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Shall not be used in:

- -ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- -tricks and jokes,
- —games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

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SECTION 15: REGULATORY INFORMATION (continued)

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION **

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):

Hazard statements

Texts of the legislative phrases mentioned in section 2:

H336: May cause drowsiness or dizziness.

H335: May cause respiratory irritation.

H317: May cause an allergic skin reaction.

H412: Harmful to aquatic life with long lasting effects.

H315: Causes skin irritation.

H373: May cause damage to organs through prolonged or repeated exposure (Oral).

H332: Harmful if inhaled.

H304: May be fatal if swallowed and enters airways.

H226: Flammable liquid and vapour.

H319: Causes serious eye irritation.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled.

Acute Tox. 4: H332 - Harmful if inhaled.

 $\label{eq:Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.}$

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.

Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Flam. Liq. 2: H225 - Highly flammable liquid and vapour.

Flam. Liq. 3: H226 - Flammable liquid and vapour.

Skin Irrit. 2: H315 - Causes skin irritation.

Skin Sens. 1: H317 - May cause an allergic skin reaction.

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Inhalation).

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).

STOT SE 3: H335 - May cause respiratory irritation.

STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:

STOT SE 3: Calculation method

STOT SE 3: Calculation method

Skin Sens. 1: Calculation method

Aquatic Chronic 3: Calculation method

Skin Irrit. 2: Calculation method

STOT RE 2: Calculation method

Acute Tox. 4: Calculation method

Asp. Tox. 1: Calculation method Flam. Liq. 3: Calculation method (2.6.4.3)

Eye Irrit. 2: Calculation method

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu

http://eur-lex.europa.eu

Abbreviations and acronyms:

** Changes with regards to the previous version

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SECTION 16: OTHER INFORMATION ** (continued)

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code IATA: International Air Transport Association ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5day biochemical oxygen demand

BCF: Bioconcentration factor LD50: Lethal Dose 50 LC50: Lethal Concentration 50 EC50: Effective concentration 50

LogPOW: Octanolwater partition coefficient Koc: Partition coefficient of organic carbon

UFI: unique formula identifier

IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET
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