

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

KMK 4525 FAST HARD. (FOR 27_2805)



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

1.1 Product identifier: KMK 4525 FAST HARD. (FOR 27_2805)

Other means of identification:

UFI: W110-Y0JR-800G-RG1K

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.

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

Flam. Liq. 2: Flammable liquids, Category 2, H225 Skin Sens. 1: Sensitisation, skin, Category 1, H317

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:

H225 - Highly flammable liquid and vapour.

H317 - May cause an allergic skin reaction.

H335 - May cause respiratory irritation.

H336 - May cause drowsiness or dizziness.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

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

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

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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

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:

EUH066: Repeated exposure may cause skin dryness or cracking.

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); N-butyl acetate; Ethyl acetate; Hydrocarbons, C9, aromatics

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SECTION 2: HAZARDS IDENTIFICATION ** (continued)

2.3 Other hazards:

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					
CAS:	28182-81-2	Hexamethylene diiso	cyanate, 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	•••	50 - <75 %			
CAS:	123-86-4	N-butyl acetate(1)		ATP CLP00				
Index:		Regulation 1272/2008	Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Warning	♦	25 - <50 %			
CAS:	141-78-6	Ethyl acetate(1)	ATP CLP00					
EC: Index: REACH:	205-500-4 607-022-00-5 01-2119475103-46- XXXX	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger	♦	5 - <10 %			
CAS:	64742-95-6	Hydrocarbons, C9, a	romatics ⁽¹⁾	Self-classified				
Index:		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		2,5 - <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:

Identification	Acut	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)		

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.

By inhalation:

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:

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SECTION 4: FIRST AID MEASURES (continued)

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

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

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

Not relevant

SECTION 5: FIREFIGHTING MEASURES

5.1 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.

5.3 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:

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.

Reference to other sections:

See sections 8 and 13.

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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.

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

Minimum Temp.: 5 °C Maximum Temp.: 30 °C

B.- General conditions for storage

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

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		
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
Ethyl acetate		IOELV (8h)	200 ppm	734 mg/m ³
CAS: 141-78-6	EC: 205-500-4	IOELV (STEL)	400 ppm	1468 mg/m ³

DNEL (Workers):

		Short e	Short exposure Long exposure		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
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

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

		Short e	exposure Long exposure		xposure
Identification		Systemic	Local	Systemic	Local
Ethyl acetate	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 141-78-6	Dermal	Not relevant	Not relevant	63 mg/kg	Not relevant
EC: 205-500-4	Inhalation	1468 mg/m ³	1468 mg/m ³	734 mg/m ³	734 mg/m ³
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 6	Short exposure		xposure
Identification		Systemic	Local	Systemic	Local
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
Ethyl acetate	Oral	Not relevant	Not relevant	4,5 mg/kg	Not relevant
CAS: 141-78-6	Dermal	Not relevant	Not relevant	37 mg/kg	Not relevant
EC: 205-500-4	Inhalation	734 mg/m ³	734 mg/m ³	367 mg/m ³	367 mg/m ³
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
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
Ethyl acetate	STP	650 mg/L	Fresh water	0,24 mg/L
CAS: 141-78-6	Soil	0,148 mg/kg	Marine water	0,024 mg/L
EC: 205-500-4	Intermittent	1,65 mg/L	Sediment (Fresh water)	1,15 mg/kg
	Oral	0,2 g/kg	Sediment (Marine water)	0,115 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



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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.

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	Face shield	CATII	EN 166:2002 EN 167:2002 EN 168:2002 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	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	CAT III	EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982- 1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	For professional use only. Clean periodically according to the manufacturer's instructions.
Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	CAT III	EN ISO 13287:2020 EN ISO 20345:2011 EN 13832-1:2019	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:

V.O.C. (Supply): 44,5 % weight

V.O.C. density at 20 °C: 444 kg/m³ (444 g/L)

Average carbon number: 5,98

Average molecular weight: 113,32 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

*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)

Odour: Characteristic
Odour threshold: Not relevant *

Volatility:

Boiling point at atmospheric pressure: 77 - 561 °C Vapour pressure at 20 °C: 2437 Pa

Vapour pressure at 50 °C: 10393,93 Pa (10,39 kPa)

Evaporation rate at 20 °C: Not relevant *

Product description:

Density at 20 °C: 1022 kg/m³ Relative density at 20 °C: 1,022

Dynamic viscosity at 20 °C: 80 cP

Kinematic viscosity at 20 °C: 2989,86 mm²/s Kinematic viscosity at 40 °C: >20,5 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 * Melting point/freezing point: Not relevant *

Flammability:

Flash Point: 21 °C

Flammability (solid, gas):

Autoignition temperature:

Lower flammability limit:

Upper flammability limit:

Not available

Not available

Particle characteristics:

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:

Heat of combustion:

Aerosols-total percentage (by mass) of flammable

Not relevant *

Not relevant *

components:

Other safety characteristics:

Surface tension at 20 °C: Not relevant * Refraction index: 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.

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SECTION 10: STABILITY AND REACTIVITY (continued)

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:

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: 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.
- B- Inhalation (acute effect):
 - Acute toxicity: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
 - 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: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for skin contact. For more information see section 3.
 - Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.
- 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)
 - 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.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: 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.
 - Skin: Repeated exposure may cause skin dryness or cracking
- H- Aspiration hazard:

Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Specific toxicology information on the substances:

Identification	A	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		
Ethyl acetate	LD50 oral	4100 mg/kg	Rat	
CAS: 141-78-6	LD50 dermal	20000 mg/kg	Rabbit	
EC: 205-500-4	LC50 inhalation	>20 mg/L		

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
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
Ethyl acetate	LC50	230 mg/L (96 h)	Pimephales promelas	Fish
CAS: 141-78-6	EC50	717 mg/L (48 h)	Daphnia magna	Crustacean
EC: 205-500-4	EC50	3300 mg/L (48 h)	Scenedesmus subspicatus	Algae
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:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
N-butyl acetate	NOEC	Not relevant		
CAS: 123-86-4 EC: 204-658-1		23,2 mg/L	Daphnia magna	Crustacean
Ethyl acetate	NOEC	9,65 mg/L	Pimephales promelas	Fish
CAS: 141-78-6 EC: 205-500-4	NOEC	2,4 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
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 %
Ethyl acetate	BOD5	1,36 g O2/g	Concentration	100 mg/L
CAS: 141-78-6	COD	1,69 g O2/g	Period	14 days
EC: 205-500-4	BOD5/COD	0,8	% Biodegradable	83 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccur	Bioaccumulation potential		
N-butyl acetate	BCF	4		
CAS: 123-86-4	Pow Log	1.78		
EC: 204-658-1	Potential	Low		
Ethyl acetate	BCF	30		
CAS: 141-78-6	Pow Log	0.73		
EC: 205-500-4	Potential	Moderate		

12.4 Mobility in soil:

Identification Absorption/desorption		on/desorption	Volatility	
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
Ethyl acetate	Koc	59	Henry	13,58 Pa·m³/mol
CAS: 141-78-6	Conclusion	Very High	Dry soil	Yes
EC: 205-500-4	Surface tension	2,324E-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:

l	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, HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity, HP13 Sensitising

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.

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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

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:



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: Nο

14.6 Special precautions for user

Special regulations: 163, 367, 650

Tunnel restriction code: D/E

Physico-Chemical properties: see section 9

Limited quantities: 5 I

14.7 Maritime transport in bulk according to IMO

instruments:

Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 41-22:

14.1 UN number or ID number: UN1263

PAINT RELATED MATERIAL **14.2** UN proper shipping name:

14.3 Transport hazard class(es): 3 Labels: 3 14.4 Packing group: III14.5 Marine pollutant: No

14.6 Special precautions for user

Special regulations: 163, 223, 955, 367

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

Limited quantities: 5 L

Segregation group: Not relevant Not relevant

14.7 Maritime transport in bulk according to IMO instruments:

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 III 14.4 Packing group: 14.5 Environmental hazards: Nο

Physico-Chemical properties: see section 9 Not relevant

14.7 Maritime transport in bulk according to IMO

14.6 Special precautions for user

instruments:

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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 iokes.
- —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:

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):

· Precautionary 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.

H225: Highly flammable liquid and vapour.

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: H332 - Harmful if inhaled.

Aquatic Chronic 2: H411 - Toxic 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 Sens. 1: H317 - May cause an allergic skin reaction.

STOT SE 3: H335 - May cause respiratory irritation.

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

Classification procedure:



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SECTION 16: OTHER INFORMATION (continued)

STOT SE 3: Calculation method STOT SE 3: Calculation method Skin Sens. 1: Calculation method Aquatic Chronic 3: Calculation method Flam. Liq. 2: Calculation method (2.6.4.3)

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:

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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