rangers

2K PROTECTIVE POLYURETHANE COATING

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

1.1 Product identifier: rangers 2K PROTECTIVE POLYURETHANE COATING

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

Relevant uses: Varnish. For professional 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:

Troton Sp. z o.o. Zabrowo 14A 78-120 Goscino - Zachodniopomorskie - Polska Phone.: +48 94 35 123 94 -Fax: +48 94 35 126 22 troton@troton.com.pl www.troton.pl

1.4 Emergency telephone number: (8am-4pm)+48 094 35 123 94; 112

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

Eye Irrit. 2: Eye irritation, Category 2, H319 Flam. Liq. 3: Flammable liquids, Category 3, H226 Skin Irrit. 2: Skin irritation, Category 2, H315 STOT RE 2: Specific target organ toxicity if swallowed, repeated exposure, Category 2, H373 STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335

2.2 Label elements:

CLP Regulation (EC) nº 1272/2008:

Warning



Hazard statements:

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects Eye Irrit. 2: H319 - Causes serious eye irritation Flam. Liq. 3: H226 - Flammable liquid and vapour Skin Irrit. 2: H315 - Causes skin irritation STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral) STOT SE 3: H335 - May cause respiratory irritation

Precautionary statements:

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

P280: Wear protective gloves/protective clothing/eye protection/face protection

P302+P352: IF ON SKIN: Wash with plenty of water

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

P403+P233: Store in a well-ventilated place. Keep container tightly closed

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

Supplementary information:

EUH208: Contains Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction

Substances that contribute to the classification

Xylene; 4-hydroxy-4-methylpentan-2-one

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture composed of chemical products

Components:

In accordance with Annex II of Regulation (EC) nº1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 1330-20-7 EC: 215-535-7 Index: 601-022-00-9 REACH 01-2119488216-32-	Xylene 1 Self-classified Regulation 1272/2008 Acute Tox. 4: H312+H332; 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 Image: Classified Classifie	25 - <50 %
CAS: 123-42-2 EC: 204-626-7 Index: 603-016-00-1 REACH 01-2119473975-21-	4-hydroxy-4-methylpentan-2-one 1 Self-classified Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 3: H226; STOT SE 3: H335 - Warning	1 - <10 %
CAS: 7779-90-0 EC: 231-944-3 Index: Non-applicable REACH 01-2119485044-40-	trizinc bis(orthophosphate) 1 ATP CLP00 Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410 - Warning	1 - <10 %
CAS: 100-41-4 EC: 202-849-4 Index: 601-023-00-4 REACH 01-2119489370-35-	Ethylbenzene ² ATP ATP06 Regulation 1272/2008 Acute Tox. 4: H332; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT RE 2: H373 - Danger Danger Image: Danger	<1 %
CAS: 872-50-4 EC: 212-828-1 Index: 606-021-00-7 REACH 01-2119472430-46-	N-methyl-2-pyrrolidone 1 ATP ATP09 Regulation 1272/2008 Eye Irrit. 2: H319; Repr. 1B: H360D; Skin Irrit. 2: H315; STOT SE 3: H335 - Danger	<1 %
CAS: 41556-26-7 EC: 255-437-1 Index: Non-applicable REACH Non-applicable	Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate 1 Self-classified Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Sens. 1: H317 - Warning	<1 %
CAS: 82919-37-7 EC: 280-060-4 Index: Non-applicable REACH Non-applicable	Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate 1 Self-classified Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Sens. 1: H317 - Warning	<1 %
CAS: 108-88-3 EC: 203-625-9 Index: 601-021-00-3 REACH 01-2119471310-51-	Toluene 2 ATP CLP00 Regulation 1272/2008 Asp. Tox. 1: H304; Flam. Liq. 2: H225; Repr. 2: H361d; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H336 - Danger	<1 %

¹ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830
² Substance with a Union workplace exposure limit

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 and 16.

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:

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, as 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.

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SECTION 4: FIRST AID MEASURES (continued)

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.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO2). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

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 individual respiratory equipment. 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. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, 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:

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 inertization agent. Destroy 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.

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.- Precautions for safe manipulation

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

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SECTION 7: HANDLING AND STORAGE (continued)

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 94/9/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 to prevent ergonomic and toxicological risks
 - 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.- Technical measures for storage Minimum Temp.: 15 °C.

Minimum Temp.:15 °CMaximum Temp.:25 °C

Maximum time: 12 Months

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 work environment

	Identification		Environmental lin	nits
Xylene		IOELV (8h)	50 ppm	221 mg/m ³
CAS: 1330-20-7		IOELV (STEL)	100 ppm	442 mg/m ³
EC: 215-535-7		Year	2017	
Ethylbenzene		IOELV (8h)	100 ppm	442 mg/m ³
CAS: 100-41-4		IOELV (STEL)	200 ppm	884 mg/m ³
EC: 202-849-4		Year	2017	
Toluene		IOELV (8h)	50 ppm	192 mg/m ³
CAS: 108-88-3		IOELV (STEL)	100 ppm	384 mg/m ³
EC: 203-625-9		Year	2017	
N-methyl-2-pyrrolidone		IOELV (8h)	10 ppm	40 mg/m ³
CAS: 872-50-4		IOELV (STEL)	20 ppm	80 mg/m ³
EC: 212-828-1		Year	2017	

DNEL (Workers):

	Short exposure		Long exposure		
Identification		Systemic	Local	Systemic	Local
Xylene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	289 mg/m ³	289 mg/m ³	77 mg/m ³	Non-applicable
4-hydroxy-4-methylpentan-2-one	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 123-42-2	Dermal	Non-applicable	Non-applicable	9,4 mg/kg	Non-applicable
EC: 204-626-7	Inhalation	Non-applicable	240 mg/m ³	66,4 mg/m ³	66,4 mg/m ³
trizinc bis(orthophosphate)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 7779-90-0	Dermal	Non-applicable	Non-applicable	83 mg/kg	Non-applicable
EC: 231-944-3	Inhalation	Non-applicable	Non-applicable	5 mg/m ³	Non-applicable

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Safety data sheet According to 1907/2006/EC (REACH), 2015/830/EU

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

		Short	exposure	Long	Long exposure	
Identification		Systemic	Local	Systemic	Local	
Ethylbenzene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable	
CAS: 100-41-4	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable	
EC: 202-849-4	Inhalation	Non-applicable	293 mg/m ³	77 mg/m ³	Non-applicable	
N-methyl-2-pyrrolidone	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable	
CAS: 872-50-4	Dermal	208 mg/kg	Non-applicable	19,8 mg/kg	Non-applicable	
EC: 212-828-1	Inhalation	80 mg/m ³	Non-applicable	40 mg/m ³	Non-applicable	
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable	
CAS: 41556-26-7	Dermal	2,5 mg/kg	Non-applicable	2,5 mg/kg	Non-applicable	
EC: 255-437-1	Inhalation	2,35 mg/m ³	2,35 mg/m ³	2,35 mg/m ³	Non-applicable	
Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable	
CAS: 82919-37-7	Dermal	2,5 mg/kg	Non-applicable	2,5 mg/kg	Non-applicable	
EC: 280-060-4	Inhalation	2,35 mg/m ³	2,35 mg/m ³	2,35 mg/m ³	Non-applicable	
Toluene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable	
CAS: 108-88-3	Dermal	Non-applicable	Non-applicable	384 mg/kg	Non-applicable	
EC: 203-625-9	Inhalation	384 mg/m ³	384 mg/m ³	192 mg/m ³	192 mg/m ³	

DNEL (General population):

		Short	exposure	Lon	Long exposure	
Identification		Systemic	Local	Systemic	Local	
Xylene	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable	
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	108 mg/kg	Non-applicable	
EC: 215-535-7	Inhalation	Non-applicable	Non-applicable	14,8 mg/m ³	Non-applicable	
4-hydroxy-4-methylpentan-2-one	Oral	Non-applicable	Non-applicable	3,4 mg/kg	Non-applicable	
CAS: 123-42-2	Dermal	Non-applicable	Non-applicable	3,4 mg/kg	Non-applicable	
EC: 204-626-7	Inhalation	Non-applicable	120 mg/m ³	11,8 mg/m ³	11,8 mg/m ³	
trizinc bis(orthophosphate)	Oral	Non-applicable	Non-applicable	0,83 mg/kg	Non-applicable	
CAS: 7779-90-0	Dermal	Non-applicable	Non-applicable	83 mg/kg	Non-applicable	
EC: 231-944-3	Inhalation	Non-applicable	Non-applicable	2,5 mg/m ³	Non-applicable	
Ethylbenzene	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable	
CAS: 100-41-4	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable	
EC: 202-849-4	Inhalation	Non-applicable	Non-applicable	15 mg/m ³	Non-applicable	
N-methyl-2-pyrrolidone	Oral	26 mg/kg	Non-applicable	6,3 mg/kg	Non-applicable	
CAS: 872-50-4	Dermal	125 mg/kg	Non-applicable	11,9 mg/kg	Non-applicable	
EC: 212-828-1	Inhalation	80 mg/m ³	Non-applicable	12,5 mg/m ³	Non-applicable	
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	Oral	1,25 mg/kg	Non-applicable	1,25 mg/kg	Non-applicable	
CAS: 41556-26-7	Dermal	1,25 mg/kg	Non-applicable	1,25 mg/kg	Non-applicable	
EC: 255-437-1	Inhalation	0,58 mg/m ³	0,58 mg/m ³	0,58 mg/m ³	Non-applicable	
Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	Oral	1,25 mg/kg	Non-applicable	1,25 mg/kg	Non-applicable	
CAS: 82919-37-7	Dermal	1,25 mg/kg	Non-applicable	1,25 mg/kg	Non-applicable	
EC: 280-060-4	Inhalation	0,58 mg/m ³	0,58 mg/m ³	0,58 mg/m ³	Non-applicable	
Toluene	Oral	Non-applicable	Non-applicable	8,13 mg/kg	Non-applicable	
CAS: 108-88-3	Dermal	Non-applicable	Non-applicable	226 mg/kg	Non-applicable	
EC: 203-625-9	Inhalation	226 mg/m ³	226 mg/m ³	56,5 mg/m ³	56,5 mg/m ³	
PNEC:			•		•	
Identification						
Xylene	STP	6,58 mg/L	Fresh water),327 mg/L	
CAS: 1330-20-7	Soil	2 31 ma/ka	Marine water) 327 ma/l	

Identification				
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	Non-applicable	Sediment (Marine water)	12,46 mg/kg

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
4-hydroxy-4-methylpentan-2-one	STP	82 mg/L	Fresh water	2 mg/L
CAS: 123-42-2	Soil	0,63 mg/kg	Marine water	0,2 mg/L
EC: 204-626-7	Intermittent	1 mg/L	Sediment (Fresh water)	9,06 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,91 mg/kg
trizinc bis(orthophosphate)	STP	0,1 mg/L	Fresh water	0,0206 mg/L
CAS: 7779-90-0	Soil	35,6 mg/kg	Marine water	0,0061 mg/L
EC: 231-944-3	Intermittent	Non-applicable	Sediment (Fresh water)	117,8 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	56,5 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	20 g/kg	Sediment (Marine water)	1,37 mg/kg
N-methyl-2-pyrrolidone	STP	10 mg/L	Fresh water	0,25 mg/L
CAS: 872-50-4	Soil	0,138 mg/kg	Marine water	0,025 mg/L
EC: 212-828-1	Intermittent	5 mg/L	Sediment (Fresh water)	1,42 mg/kg
	Oral	1,67 g/kg	Sediment (Marine water)	0,142 mg/kg
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	STP	1 mg/L	Fresh water	0,0022 mg/L
CAS: 41556-26-7	Soil	0,21 mg/kg	Marine water	0,00022 mg/L
EC: 255-437-1	Intermittent	0,009 mg/L	Sediment (Fresh water)	1,05 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,11 mg/kg
Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	STP	1 mg/L	Fresh water	0,0022 mg/L
CAS: 82919-37-7	Soil	0,21 mg/kg	Marine water	0,00022 mg/L
EC: 280-060-4	Intermittent	0,009 mg/L	Sediment (Fresh water)	1,05 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,11 mg/kg
Toluene	STP	13,61 mg/L	Fresh water	0,68 mg/L
CAS: 108-88-3	Soil	2,89 mg/kg	Marine water	0,68 mg/L
EC: 203-625-9	Intermittent	0,68 mg/L	Sediment (Fresh water)	16,39 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	16,39 mg/kg

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection 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		EN 405:2001+A1:2009	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.
Specific protectio	n for the hands			
Pictogram	PPE	Labelling	CEN Standard	Remarks

reliability and has therefore to be checked prior to the application

D.- Ocular and facial protection



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	Pictogram		PPE	Labelling	CEN Standard		Remarks
	Mandatory face protection		nic glasses against sh/projections.		EN 166:2001 EN ISO 4007:2012		an daily and disinfect periodically accordin e manufacturer 's instructions. Use if there risk of splashing.
E	Bodily protection						
	Pictogram		PPE	Labelling	CEN Standard		Remarks
	Mandatory complete body protection		atic and fireproof tective clothing		EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2001 EN ISO 14116:2015 EN 1149-5:2008		Limited protection against flames.
	Mandatory foot protection		y footwear with c and heat resistant properties		EN 13287:2008 EN ISO 20345:2011		Replace boots at any sign of deterioration
F	Additional emerger	ncy mea	sures				
	Emergency mea	sure	St	andards	Emergency meas	sure	Standards
	Emergency show	wer		SI Z358-1 864-1:2002	Eyewash station	ns	DIN 12 899 ISO 3864-1:2002
In a of b		e commi d its cor	unity legislation fo ntainer. For additi		of the environment it is see subsection 7.1.D	recom	mended to avoid environmental s
	-	-		ct has the follow	wing characteristics:		
	.C. (Supply):		34,25 % weight		-		
	.C. density at 20 %	C:	389 kg/m ³ (389				
	rage carbon numb		7,81				
	rage molecular wei		-				

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical	properties:
	For complete information see the product datashe	eet.
	Appearance:	
	Physical state at 20 °C:	Liquid
	Appearance:	Viscous
	Colour:	Black
	Odour:	Not available
	Odour threshold:	Non-applicable *
	Volatility:	
	Boiling point at atmospheric pressure:	140 °C
	Vapour pressure at 20 °C:	692 Pa
	Vapour pressure at 50 °C:	3834 Pa (4 kPa)
	Evaporation rate at 20 °C:	Non-applicable *
	Product description:	
	*Not relevant due to the nature of the product, not providing	information property of its hazards.



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CTION 9: PHYSICAL AND CHEMI	AL PROPERTIES (continued)
Density at 20 °C:	1240 kg/m³
Relative density at 20 °C:	Non-applicable *
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	>20,5 cSt
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/wate	20 °C: Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Flammability:	
Flash Point:	28 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	275 °C
Lower flammability limit:	Not available
Upper flammability limit:	Not available
Explosive:	
Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *
2 Other information:	
Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *
*Not relevant due to the nature of the proc	ct, 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.

10.2 Chemical stability:

Chemically stable under the 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	Combustive materials	Combustible materials	Others	
	Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases	
10.6	L0.6 Hazardous decomposition products:					



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SECTION 10: STABILITY AND REACTIVITY (continued)

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 toxicological effects:

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 recommended by the occupational exposure limits, it may result in adverse effects on health 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 dangerous 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 : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous 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: 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 dangerous for the effects mentioned. For more information see section 3.
 - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Reproductive toxicity: Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous 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 dangerous with sensitising effects. For more information see section 3.
 - Cutaneous: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous with sensitising effects. For more information see section 3.
- 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 cause a breakdown in 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, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- H- Aspiration hazard:

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

Other information:

Non-applicable

Specific toxicology information on the substances:



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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	/	Acute toxicity	
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 (4 h) (ATEi)	
4-hydroxy-4-methylpentan-2-one	LD50 oral	4000 mg/kg	Rat
CAS: 123-42-2	LD50 dermal	13630 mg/kg	Rabb
EC: 204-626-7	LC50 inhalation	>20 mg/L (4 h)	
trizinc bis(orthophosphate)	LD50 oral	>2000 mg/kg	
CAS: 7779-90-0	LD50 dermal	>2000 mg/kg	
EC: 231-944-3	LC50 inhalation	>5 mg/L (4 h)	
Ethylbenzene	LD50 oral	3500 mg/kg	Rat
CAS: 100-41-4	LD50 dermal	15354 mg/kg	Rabb
EC: 202-849-4	LC50 inhalation	17,2 mg/L (4 h)	Rat
N-methyl-2-pyrrolidone	LD50 oral	3598 mg/kg	Rat
CAS: 872-50-4	LD50 dermal	7000 mg/kg	Rat
EC: 212-828-1	LC50 inhalation	>20 mg/L	-
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LD50 oral	2615 mg/kg	Rat
CAS: 41556-26-7	LD50 dermal	>2000 mg/kg	
EC: 255-437-1	LC50 inhalation	>20 mg/L	
Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	LD50 oral	>2000 mg/kg	
CAS: 82919-37-7	LD50 dermal	>2000 mg/kg	
EC: 280-060-4	LC50 inhalation	>5 mg/L	
Toluene	LD50 oral	5580 mg/kg	Rat
CAS: 108-88-3	LD50 dermal	12124 mg/kg	Rat
EC: 203-625-9	LC50 inhalation	28,1 mg/L (4 h)	Rat

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Toxicity:

Identification		Acute toxicity	Species	Genus
Xylene	LC50	13.5 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 1330-20-7	EC50	3.4 mg/L (48 h)	Ceriodaphnia dubia	Crustacean
EC: 215-535-7	EC50	10 mg/L (72 h)	Skeletonema costatum	Algae
4-hydroxy-4-methylpentan-2-one	LC50	420 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 123-42-2	EC50	9016 mg/L (24 h)	Daphnia magna	Crustacean
EC: 204-626-7	EC50	Non-applicable		
trizinc bis(orthophosphate)	LC50	0.1 - 1 mg/L (96 h)		Fish
CAS: 7779-90-0	EC50	0.1 - 1 mg/L		Crustacean
EC: 231-944-3	EC50	0.1 - 1 mg/L		Algae
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
N-methyl-2-pyrrolidone	LC50	832 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 872-50-4	EC50	4897 mg/L (48 h)	Daphnia magna	Crustacean
EC: 212-828-1	EC50	500 mg/L (72 h)	Scenedesmus subspicatus	Algae
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	LC50	0.97 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 41556-26-7	EC50	20 mg/L (24 h)	Daphnia magna	Crustacean
EC: 255-437-1	EC50	Non-applicable		
Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	LC50	0.1 - 1 mg/L (96 h)		Fish
CAS: 82919-37-7	EC50	0.1 - 1 mg/L		Crustacean
EC: 280-060-4	EC50	0.1 - 1 mg/L		Algae



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SECTION 12: ECOLOGICAL INFORMATION (continued) Identification Acute toxicity Species Genus Toluene 13 mg/L (96 h) Carassius auratus Fish LC50 CAS: 108-88-3 EC50 11.5 mg/L (48 h) Daphnia magna Crustacean EC: 203-625-9 EC50 125 mg/L (48 h) Scenedesmus subspicatus Algae 12.2 Persistence and degradability: Identification Degradability Biodegradability Xylene BOD5 Non-applicable Concentration Non-applicable COD CAS: 1330-20-7 Non-applicable Period 28 days BOD5/COD EC: 215-535-7 Non-applicable % Biodegradable 88 % 4-hydroxy-4-methylpentan-2-one BOD5 Non-applicable Concentration 100 mg/L 14 days CAS: 123-42-2 COD Non-applicable Period Non-applicable EC: 204-626-7 BOD5/COD % Biodegradable 90 % Ethylbenzene BOD5 Non-applicable Concentration 100 mg/L CAS: 100-41-4 COD Non-applicable Period 14 days EC: 202-849-4 BOD5/COD Non-applicable % Biodegradable 90 % N-methyl-2-pyrrolidone BOD5 1.09 g O2/g Concentration 100 mg/L CAS: 872-50-4 COD 1.6 g O2/g Period 28 days EC: 212-828-1 BOD5/COD 0.68 % Biodegradable 73 % Toluene BOD5 2.5 g O2/g Concentration 100 mg/L CAS: 108-88-3 COD Non-applicable Period 14 days Non-applicable 100 % EC: 203-625-9 BOD5/COD % Biodegradable 12.3 **Bioaccumulative potential: Bioaccumulation potential** Identification BCF Xylene CAS: 1330-20-7 Pow Log 2.77 EC: 215-535-7 Potential Low 4-hydroxy-4-methylpentan-2-one BCF 0.5 CAS: 123-42-2 Pow Log -0.34 EC: 204-626-7 Potential low Ethylbenzene BCF CAS: 100-41-4 Pow Log 3.15 EC: 202-849-4 Potential Low N-methyl-2-pyrrolidone BCF 0.23 CAS: 872-50-4 Pow Log -0.46 EC: 212-828-1 Potential Low BCF Toluene 13 CAS: 108-88-3 Pow Log 2.73 EC: 203-625-9 Potential Low 12.4 Mobility in soil: Identification Absorption/desorption Volatility 202 Henry 524,86 Pa·m³/mol **Xvlene** Koc CAS: 1330-20-7 Conclusion Moderate Dry soil Yes EC: 215-535-7 Surface tension Non-applicable Moist soil Yes 4-hydroxy-4-methylpentan-2-one Кос Non-applicable Henry Non-applicable Conclusion CAS: 123-42-2 Non-applicable Dry soil Non-applicable Surface tension EC: 204-626-7 2,963E-2 N/m (25 °C) Moist soil Non-applicable Ethylbenzene Henry 798,44 Pa·m³/mol Кос 520 CAS: 100-41-4 Conclusion Moderate Yes Drv soil EC: 202-849-4 Surface tension 2,859E-2 N/m (25 °C) Moist soil Yes N-methyl-2-pyrrolidone Non-applicable Кос Non-applicable Henry CAS: 872-50-4 Conclusion Non-applicable Dry soil Non-applicable EC: 212-828-1 4,007E-2 N/m (25 °C) Surface tension Moist soil Non-applicable



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	ADSOF	Absorption/desorption		Volatility	
Toluene	Кос	178	Henry	672,8 Pa·m³/mol	
CAS: 108-88-3	Conclusion	Moderate	Dry soil	Yes	
EC: 203-625-9	Surface tension	2,793E-2 N/m (25 °C)	Moist soil	Yes	
2.5 Results of PBT and vPvB assess	ment:				
Product fails to meet PBT/vPvB crite	eria				
2.6 Other adverse effects:					

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 dangerous substances	Dangerous

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

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

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-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) $n^{0}1907/2006$ (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 2017 and RID 2017:

14.1	UN number:	UN1263
14.2	UN proper shipping name:	PAINT
14.3	Transport hazard class(es):	3
$\langle \simeq \rangle$	Labels:	3
14.4	Packing group:	III
14.5	Environmental hazards:	No
14.6	Special precautions for user	
	Special regulations:	163, 367, 640E, 650
	Tunnel restriction code:	D/E
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code:	Non-applicable
Transport of dangero	us goods by sea:	
With regard to IMDG 38	-16:	

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TION 14: TRANSPORT INFORMATION (continued)			
1	I.1 UN number:	UN1263	
1	I.2 UN proper shipping name:	PAINT	
	I.3 Transport hazard class(es):	3	
	Labels:	3	
	I.4 Packing group:	III	
3 1	I.5 Environmental hazards:	No	
v 1	I.6 Special precautions for user		
	Special regulations:	163, 223, 367, 955	
	EmS Codes:	F-E, S-E	
	Physico-Chemical properties:	see section 9	
	Limited quantities:	5 L	
1	I.7 Transport in bulk according to Annex II of Marpol and the IBC Code:	Non-applicable	
Transport of dang	erous goods by air:		
With regard to IATA	ICAO 2017:		
1	I.1 UN number:	UN1263	
	I.2 UN proper shipping name:	PAINT	
	I.3 Transport hazard class(es):	3	
	Labels:	3	
3 1	I.4 Packing group:	III	
1	I.5 Environmental hazards:	No	
1	I.6 Special precautions for user		
	Physico-Chemical properties:	see section 9	
1	I.7 Transport in bulk according to Annex II of Marpol and the IBC Code:	Non-applicable	

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): N-methyl-2-pyrrolidone

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

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



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SECTION 15: REGULATORY INFORMATION (continued)

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- "whoopee" cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

'For professional users only'.

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 data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, 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:

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 (Regulation (EC) Nº 2015/830)

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

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation

- H335: May cause respiratory irritation
- H373: May cause damage to organs through prolonged or repeated exposure (Oral)
- H412: Harmful to aquatic life with long lasting effects
- 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:



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SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled Acute Tox. 4: H332 - Harmful if inhaled Aquatic Acute 1: H400 - Very toxic to aquatic life Aquatic Chronic 1: H410 - Very 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 Repr. 1B: H360D - May damage the unborn child. Repr. 2: H361d - Suspected of damaging the unborn child. 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 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:

Skin Irrit. 2: Calculation method STOT SE 3: Calculation method STOT RE 2: Calculation method Aquatic Chronic 3: Calculation method Flam. Liq. 3: Calculation method (2.6.4.3) Eye Irrit. 2: Calculation method

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order 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: 5-day biochemical oxygen demand BCF: Bioconcentration factor LD50: Lethal Dose 50 LC50: Lethal Concentration 50 EC50: Effective concentration 50 LOg-POW: Octanol–water partition coefficient Koc: Partition coefficient of organic carbon

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.