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

SAFETY DATA SHEET



Penguard Express CF Comp A

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

1.1 Product identifier

Product name	: Penguard Express CF Comp A
Product code	: 29140
Product description	: Paint.
Product type	: Liquid.
Other means of identification	: Not available.

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

Use in coatings - Industrial use Use in coatings - Professional use

1.3 Details of the supplier of the safety data sheet

Jotun A/S P.O.Box 2021 3202 Sandefjord Norway

Tel: + 47 33 45 70 00 Fax: +47 33 45 72 42 E-mail: SDSJotun@jotun.no

National contact

Jotun Paints Europe (Ltd). Unit K7, Marina Commercial Park Centre Park Road Cork Ireland

Tel: +353 214 965955 Fax: +353 214 965992

SDSJotun@jotun.com

1.4 Emergency telephone number

Poisons Information Centre of Ireland: +353 1 809 3000 (8am-10pm, 7 days a week)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition

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

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Date of issue/Date of revision

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

Penguard Express CF Comp A

SECTION 2: Hazards identification

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

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

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

2.2 Label elements

Hazard pictograms

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Signal word	:	Danger.
Hazard statements	:	H226 - Flammable liquid and vapour. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements		
General		Not applicable.
Prevention	:	 P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment. P261 - Avoid breathing spray.
Response	:	 P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	1	Not applicable.
Disposal	1	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	:	epoxy resin (MW ≤ 700) butan-1-ol hydrocarbons, c9-unsatd., polymd. Phenol, methylstyrenated Phenol, styrenated 2-Propenoic acid, reaction products with pentaerythritol hexane-1,6-diol diacrylate
Supplemental label elements	:	EUH205 - Contains epoxy constituents. May produce an allergic reaction.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Special packaging requirem	en	<u>its</u>
Containers to be fitted with child-resistant fastenings	-	Not applicable.
Tactile warning of danger	1	Not applicable.
2.3 Other hazards		

SECTION 2: Hazards identification

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII Other hazards which do

: This mixture contains substances that are assessed to be a PBT or a vPvB, refer to Section 3.2.

: None known.

not result in classification

The mixture may be a skin sensitiser. It may also be a skin irritant and repeated contact may increase this effect.

SECTION 3: Composition/information on ingredients

3.2 Mixtures Product/ingredient name	: Mixture	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
epoxy resin (MW ≤ 700)	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2	≥10 - ≤23	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5%	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≤5	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (vapours)] = 11 mg/ I	[1] [2]
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≤5	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	ATE [Oral] = 500 mg/kg	[1] [2]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≤3	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	ATE [Oral] = 1230 mg/kg ATE [Inhalation (vapours)] = 11 mg/ I	[1]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≤3	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]
hydrocarbons, c9-unsatd., polymd.	REACH #: 01-2119555292-40 EC: 701-299-7 CAS: 71302-83-5	≤3	Skin Sens. 1, H317 Aquatic Chronic 3, H412	-	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤3	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Inhalation (vapours)] = 11 mg/ I	[1] [2]

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SECTION 3: Compo	sition/informat	ion on in	gredients		
hydrocarbons, C9, aromatics	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 128601-23-0	≤1.5	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	-	[1]
Phenol, methylstyrenated	REACH #: 01-2119555274-38 EC: 700-960-7 CAS: 68512-30-1	<1	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412	-	[1] [3]
Phenol, styrenated	REACH #: 02-2119629611-43 EC: 262-975-0 CAS: 61788-44-1	<1	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411	-	[1]
2-Propenoic acid, reaction products with pentaerythritol	REACH #: 01-2119490003-49 EC: 629-850-6 CAS: 1245638-61-2	<1	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	ATE [Oral] = 500 mg/kg	[1]
hexane-1,6-diol diacrylate	REACH #: 01-2119484737-22 EC: 235-921-9 CAS: 13048-33-4 Index: 607-109-00-8	≤0.3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412	-	[1]
			See Section 16 for the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

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

SECTION 4: First aid measures

4.1 Description of first	aid measures
General	 In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
Eye contact	 Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation	 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Penguard	Express	CF Comp	Α

SECTION 4: First aid measures

Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it
	is suspected that fumes are still present, the rescuer should wear an appropriate
	mask or self-contained breathing apparatus. It may be dangerous to the person
	providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing
	thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
4.3 Indication of any in	mmediate medical attention and special treatment needed

Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media		
Suitable extinguishing media	Recommended: alcohol-resistant foam, CO ₂ , powders, water spray.	
Unsuitable extinguishing media	Do not use water jet.	
5.2 Special hazards arising fr	n the substance or mixture	
Hazards from the substance or mixture	Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.	
Hazardous combustion products	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.	
5.3 Advice for firefighters		
Special protective actions for fire-fighters	Cool closed containers exposed to fire with water. Do not release runoff from fire drains or watercourses.	to
Special protective equipment for fire-fighters	Appropriate breathing apparatus may be required.	

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	te	ctive equipment and emergency procedures
For non-emergency personnel	:	Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	:	Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.
6.3 Methods and material for containment and cleaning up	:	Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.
6.4 Reference to other sections	:	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

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

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

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

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8).

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

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

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

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

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

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

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

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Seveso Directive - Reporting thresholds

SECTION 7: Handling and storage

Danger criteria		
Category	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne

See Technical Data Sheet / packaging for further information.

7.3 Specific end use(s)

Recommendations	: Not available.
Industrial sector specific solutions	: Not available.

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values		
xylene butan-1-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-, p- or mixed isomers] Absorbed through skin. STEL: 441 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed		
	through skin. STEL: 154 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes.		
2-methoxy-1-methylethyl acetate ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 548 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 274 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 552 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 441 mg/m ³ 8 hours.		
Product/ingredient name	Exposure indices		
procedures European Stan assessment of values and mea atmospheres - of exposure to (Workplace atm for the measure documents for required.	uld be made to monitoring standards, such as the following: dard EN 689 (Workplace atmospheres - Guidance for the exposure by inhalation to chemical agents for comparison with limit asurement strategy) European Standard EN 14042 (Workplace Guide for the application and use of procedures for the assessment chemical and biological agents) European Standard EN 482 nospheres - General requirements for the performance of procedures ement of chemical agents) Reference to national guidance methods for the determination of hazardous substances will also be		
DNELs/DMELs			

Product/ingredient name	Туре	Exposure	Value	Population	Effects
epoxy resin (MW ≤ 700)	DNEL	Long term Dermal	89.3 µg/kg	General	Systemic
	DNEL	Long term Oral	bw/day 0.5 mg/kg	population General	Systemic
	DNEL	Long term Dermal	bw/day 0.75 mg/	population Workers	Systemic
	DNEL	Long term	kg bw/day 0.87 mg/m³	General	Systemic
	DNEL	Inhalation Long term	4.93 mg/m ³	population Workers	Systemic
xylene	DNEL	Inhalation Long term Oral	5 mg/kg	General	Systemic
	DNEL	Long term	bw/day 65.3 mg/m³	population General	Local
	DNEL	Inhalation Long term	65.3 mg/m³	population General	Systemic
	DNEL	Inhalation Long term Dermal	125 mg/kg	population General	Systemic
	DNEL	Long term Dermal	bw/day 212 mg/kg	population Workers	Systemic
	DNEL	Long term Inhalation	bw/day 221 mg/m³	Workers	Local
	DNEL	Long term Inhalation	221 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	260 mg/m ³	General population	Local
	DNEL	Short term Inhalation	260 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	442 mg/m ³	Workers	Systemic
butan-1-ol	DNEL	Long term Oral	1.5625 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.125 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	55.357 mg/	General population	Systemic
	DNEL	Long term Inhalation	155 mg/m ³	General population	Local
	DNEL	Long term Inhalation	310 mg/m³	Workers	Local
benzyl alcohol	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	5.4 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	8 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Oral	20 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	22 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	27 mg/m³	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Short term	110 mg/m ³	Workers	Systemic

		Inhalation			
2-methoxy-1-methylethyl acetate	DNEL	Long term Dermal	153.5 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	275 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	54.8 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	33 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Oral	1.67 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	33 mg/m³	General population	Local
	DNEL	Long term Inhalation	33 mg/m³	General population	Systemic
	DNEL	Long term Oral	36 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	275 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	320 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	550 mg/m³	Workers	Local
	DNEL	Long term Dermal	796 mg/kg bw/day	Workers	Systemic
hydrocarbons, c9-unsatd., polymd.	DNEL	Long term Dermal	3.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.41 mg/m ³		Systemic
ethylbenzene	DMEL	Long term Inhalation	442 mg/m ³	Workers	Local
	DMEL	Short term Inhalation	884 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation Long term	15 mg/m ³ 77 mg/m ³	General population Workers	Systemic Systemic
	DNEL	Inhalation Long term Dermal	180 mg/kg	Workers	Systemic
	DNEL	Short term	bw/day 293 mg/m ³	Workers	Local
hydrocarbons, C9, aromatics	DNEL	Inhalation Long term Dermal	12.5 mg/	Workers	Systemic
,, <u></u> , <u></u> , <u></u>	DNEL	Long term	kg bw/day 151 mg/m³	Workers	Systemic
	DNEL	Inhalation Long term Dermal	7.5 mg/kg	General	Systemic
			bw/day	population [Consumers]	
	DNEL	Long term Inhalation	32 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Oral	7.5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	0.41 mg/m ³	General population	Systemic
	DNEL	Long term	1.9 mg/m³	Workers	Systemic

ECTION 8: Exposure controls/personal protection					
		Inhalation			
	DNEL	Long term	178.57 mg/	General	Local
		Inhalation	m^3	population	1
	DNEL	Short term	640 mg/m ³	General	Local
		Inhalation	007 5	population	
	DNEL	Long term Inhalation	837.5 mg/ m³	Workers	Local
	DNEL	Short term	1066.67	Workers	Local
	DNEL	Inhalation	mg/m ³	VUIKEIS	LUCAI
	DNEL	Short term	1152 mg/	General	Systemic
	DINEL	Inhalation	m ³	population	oysternie
	DNEL	Short term	1286.4 mg/	Workers	Systemic
	DITE	Inhalation	m ³	TT OINGIO	e yetenne
Phenol, methylstyrenated	DNEL	Long term Dermal	16.4 mg/	Workers	Systemic
i nenel, metrijietji enated	BILL	Long toni Donna	kg bw/day	TT OINGIO	e you into
	DNEL	Long term	57 mg/m ³	General	Systemic
		Inhalation	J	population	, -
				[Consumers]	
	DNEL	Long term Dermal	8 mg/kg	General	Systemic
			bw/day	population	-
				[Consumers]	
	DNEL	Long term	28 mg/m ³	General	Systemic
		Inhalation		population	
				[Consumers]	
	DNEL	Long term Oral	4 mg/kg	General	Systemic
			bw/day	population	
				[Consumers]	
	DNEL	Long term Oral	0.2 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term	0.348 mg/	General	Systemic
		Inhalation	m ³	population	
	DNEL	Long term	1.41 mg/m ³	Workers	Systemic
		Inhalation	1.67 mg/	Conorol	Sustamia
	DNEL	Long term Dermal	1.67 mg/	General	Systemic
	DNEL	Long term Dermal	kg bw/day 3.5 mg/kg	population Workers	Svotomio
	DINEL	Long term Derma		VVOIKEIS	Systemic
Phenol, styrenated	DNEL	Long term Oral	bw/day 0.75 mg/	General	Systemic
i nonoi, styronated			kg bw/day	population	Gysternie
	DNEL	Long term Dermal	0.75 mg/	General	Systemic
			kg bw/day	population	
	DNEL	Long term	1.31 mg/m ³		Systemic
		Inhalation	3	population	, -
	DNEL	Long term Dermal	2.1 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Long term	7.4 mg/m ³	Workers	Systemic
		Inhalation			-
hexane-1,6-diol diacrylate	DNEL	Long term Dermal	1.66 mg/	General	Systemic
-			kg bw/day	population	
	DNEL	Long term Oral	2.1 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	2.77 mg/	Workers	Systemic
			kg bw/day		
	DNEL	Long term	7.2 mg/m³	General	Systemic
		Inhalation		population	
	DNEL	Long term	24.5 mg/m ³	Workers	Systemic
		Inhalation			

PNECs

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Compartment Detail	Value	Method Detail
epoxy resin (MW ≤ 700)	Fresh water	0.006 mg/l	-
	Marine	0.0006 mg/l	-
	Sewage Treatment	10 mg/l	-
	Plant	U U	
	Fresh water sediment	0.996 mg/l	-
	Marine water sediment	0.0996 mg/l	_
	Soil	0.196 mg/l	_
xylene	Fresh water	0.327 mg/l	_
Aylene	Marine	0.327 mg/l	_
	Sewage Treatment	6.58 mg/l	_
	Plant	0.00 mg/i	
	Fresh water sediment	12.46 mg/kg dwt	_
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-
huton 1 ol			-
butan-1-ol	Fresh water	0.082 mg/l	-
	Marine	0.0082 mg/l	-
	Sewage Treatment	2476 mg/l	-
	Plant		
	Fresh water sediment	0.178 mg/kg dwt	-
	Marine water sediment	0.0178 mg/kg dwt	-
	Soil	0.015 mg/kg dwt	-
benzyl alcohol	Fresh water	1 mg/l	-
	Marine	0.1 mg/l	-
	Sewage Treatment	39 mg/l	-
	Plant		
	Fresh water sediment	5.27 mg/kg dwt	-
	Marine water sediment	0.527 mg/kg dwt	-
	Soil	0.456 mg/kg dwt	-
2-methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l	_
	Marine	0.0635 mg/l	_
	Sewage Treatment	100 mg/l	_
	Plant	100 mg/i	
	Fresh water sediment	3.29 mg/kg dwt	_
	Marine water sediment	0.329 mg/kg dwt	
	Soil	0.29 mg/kg dwt	-
hydrocarbons, c9-unsatd., polymd.	Fresh water	54 µg/l	-
nyurocarbons, c9-unsatu., polymu.			-
	Marine	5.4 µg/l	-
	Sewage Treatment	2.2 mg/l	-
	Plant	4504	
	Fresh water sediment	1584 mg/kg dwt	-
	Marine water sediment	158 mg/kg dwt	-
	Soil	316.7 mg/kg dwt	-
	Secondary Poisoning	200 mg/kg	-
ethylbenzene	Fresh water	0.1 mg/l	-
	Marine	0.01 mg/l	-
	Sewage Treatment	9.6 mg/l	-
	Plant		
	Fresh water sediment	13.7 mg/kg dwt	-
	Soil	2.68 mg/kg dwt	-
	Secondary Poisoning	20 mg/kg	-
Phenol, methylstyrenated	Fresh water	14 µg/l	-
, , , ,	Marine	1.4 µg/l	-
	Sewage Treatment	2.4 mg/l	-
	Plant		
	Fresh water sediment	52.9 mg/kg dwt	_
	Marine water sediment	5.3 mg/kg dwt	
	Soil	10.5 mg/kg dwt	-
	301	TO.5 Mg/kg dwt	1-

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

-	
Appropriate engineering controls	: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.
Individual protection measur	<u>es</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Skin protection	

Skin protection

Hand protection

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

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

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

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

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

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

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

Gloves

Wear suitable gloves tested to ISO 374-1:2016.

May be used, gloves(breakthrough time) 4 - 8 hours: neoprene (> 0.35 mm), butyl rubber (> 0.4 mm), PVC (> 0.5 mm)

Recommended, gloves(breakthrough time) > 8 hours: Teflon (> 0.35 mm), 4H/Silver Shield® (> 0.07 mm), polyvinyl alcohol (PVA) (> 0.3 mm), nitrile rubber (> 0.75 mm), Viton® (> 0.7 mm)

For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Body protection	: Use chemical-resistant protective suit / disposable overall.
	Personnel should wear antistatic clothing made of natural fibres or of high- temperature-resistant synthetic fibres.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387 (as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.
Environmental exposure controls	: Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Black, Blue., Green., Grey, MCI Base 1, MCI Base 3, Off-white., Red, White., Yellow.
Odour	: Characteristic.
Odour threshold	: Not applicable.
Melting point/freezing point	: Not applicable.
Initial boiling point and boiling range	: Lowest known value: 119°C (246.2°F) (butan-1-ol). Weighted average: 230.14°C (446.3°F)
Flammability	: Not applicable.
Lower and upper explosion limit	: Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)
Flash point	: Closed cup: 29°C
Auto-ignition temperature	: Lowest known value: 333°C (631.4°F) (2-methoxy-1-methylethyl acetate).
Decomposition temperature	: Not available.
рН	Not applicable.
Viscosity	: Not available.
Solubility in water	: cold water Not soluble hot water Not soluble
Partition coefficient: n-octanol/ water	: Not available.
Vapour pressure	: Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.27 kPa (2.03 mm Hg) (at 20°C)
Evaporation rate	: Highest known value: 0.84 (ethylbenzene) Weighted average: 0.5compared with butyl acetate
Density	: 1.543 to 1.678 g/cm ³
Vapour density	: Highest known value: 11.7 (Air = 1) (epoxy resin (MW ≤ 700)). Weighted average: 8.42 (Air = 1)
Explosive properties	: Not available.
Oxidising properties	: Not available.
Particle characteristics	
Median particle size	: Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	1	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	1	Stable under recommended storage and handling conditions (see Section 7).
10.3 Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	;	When exposed to high temperatures may produce hazardous decomposition products.
10.5 Incompatible materials	:	Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products	:	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Date of issue/Date of revision

SECTION 11: Toxicological information

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

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
epoxy resin (MW ≤ 700)	LD50 Dermal	Rabbit	20 g/kg	-
	LD50 Oral	Mouse	15600 mg/kg	-
xylene	LC50 Inhalation Vapour	Rat	11 mg/l	4 hours
-	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
butan-1-ol	LD50 Oral	Rat	790 mg/kg	-
benzyl alcohol	LD50 Oral	Rat	1230 mg/kg	-
2-methoxy-1-methylethyl	LD50 Dermal	Rabbit	>5 g/kg	-
acetate				
	LD50 Oral	Rat	8532 mg/kg	-
hydrocarbons, c9-unsatd., polymd.	LD50 Dermal	Rat	2000 mg/kg	-
	LD50 Oral	Rat	2000 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat - Male	11 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
Phenol, styrenated	LD50 Dermal	Rabbit	>5010 mg/kg	-
	LD50 Oral	Rat	2500 mg/kg	-
hexane-1,6-diol diacrylate	LD50 Oral	Rat	5 g/kg	-

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Penguard Express CF Comp A	12387.7	23060.8	N/A	124.2	N/A
xylene	4300	1100	N/A	11	N/A
butan-1-ol	500	N/A	N/A	N/A	N/A
benzyl alcohol	1230	N/A	N/A	11	N/A
2-methoxy-1-methylethyl acetate	8532	N/A	N/A	N/A	N/A
ethylbenzene	3500	N/A	N/A	11	N/A
Phenol, styrenated	2500	N/A	N/A	N/A	N/A
2-Propenoic acid, reaction products with pentaerythritol	500	N/A	N/A	N/A	N/A
hexane-1,6-diol diacrylate	5000	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
epoxy resin (MW ≤ 700)	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
				milligrams	
	Skin - Mild irritant	Rabbit	-	500	-
				milligrams	
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60	-
				microliters	
benzyl alcohol	Eyes - Mild irritant	Mammal -	-	-	-
		species			
		unspecified			
Phenol, methylstyrenated	Skin - Mild irritant	Mammal -	-	-	-
		species			
		unspecified			
Phenol, styrenated	Eyes - Mild irritant	Rabbit	-	0.1 Mililiters	-
	Skin - Mild irritant	Mammal -	-	-	-
		species			
		unspecified			
	Skin - Mild irritant	Rabbit	-	0.5 Mililiters	-
2-Propenoic acid, reaction	Eyes - Irritant	Mammal -	-	-	-

Penguard	Fynress	CE	Comn	Δ
renguaru	LAPIESS	U 1	Comp	~

SECTION 11: Toxicological information

SECTION 11: TOXICO	logical informatio	n			
products with pentaerythritol	Skin - Mild irritant	species unspecified Mammal - species unspecified	-	-	-
hexane-1,6-diol diacrylate	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Mammal - species unspecified	-	-	-

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
epoxy resin (MW ≤ 700)	skin	Mammal - species unspecified	Sensitising
hydrocarbons, c9-unsatd., polymd.	skin	Mouse	Sensitising
Phenol, methylstyrenated	skin	Mammal - species unspecified	Sensitising
Phenol, styrenated	skin	Mammal - species unspecified	Sensitising
2-Propenoic acid, reaction products with pentaerythritol	skin	Mammal - species unspecified	Sensitising
hexane-1,6-diol diacrylate	skin	Mammal - species unspecified	Sensitising

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

Developmental effects

- **Fertility effects**
- : No known significant effects or critical hazards. : No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
butan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
2-methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
hydrocarbons, C9, aromatics	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

Aspiration hazard

Product/ingredient name Result xylene ASPIRATION HAZARD - Category 1 ethylbenzene ASPIRATION HAZARD - Category 1 hydrocarbons, C9, aromatics ASPIRATION HAZARD - Category 1

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
epoxy resin (MW ≤ 700)	Acute EC50 1.4 mg/l	Daphnia	48 hours
	Acute LC50 3.1 mg/l	Fish - pimephales promelas	96 hours
	Chronic NOEC 0.3 mg/l	Fish	21 days
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes	48 hours
		pugio	
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
ethylbenzene	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
-	Acute EC50 2.93 mg/l	Daphnia	48 hours
	Acute LC50 4.2 mg/l	Fish	96 hours
hydrocarbons, C9, aromatics	Acute EC50 <10 mg/l	Daphnia	48 hours
-	Acute IC50 <10 mg/l	Algae	72 hours
	Acute LC50 <10 mg/l	Fish	96 hours
Phenol, styrenated	Acute EC50 100 mg/l	Algae	72 hours
-	Acute EC50 54 mg/l	Daphnia	48 hours
	Acute LC50 25.8 mg/l	Fish	96 hours

Conclusion/Summary

: This material is harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Conclusion/Summary	: Not available.		
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
epoxy resin (MW ≤ 700) xylene	-	-	Not readily Readily
benzyl alcohol ethylbenzene	-	-	Readily Readily
hydrocarbons, C9, aromatics	-	-	Not readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	LogPow	BCF	Potential
epoxy resin (MW ≤ 700)	2.64 to 3.78	31	low
xylene	3.12	8.1 to 25.9	low
butan-1-ol	1	-	low
benzyl alcohol	0.87	<100	low
2-methoxy-1-methylethyl acetate	1.2	-	low
hydrocarbons, c9-unsatd., polymd.	3.627	-	low
ethylbenzene	3.6	-	low
hydrocarbons, C9, aromatics	-	10 to 2500	high
Phenol, methylstyrenated	3.627	-	low
2-Propenoic acid, reaction products with pentaerythritol	1.45	-	low
hexane-1,6-diol diacrylate	2.81	-	low

12.4 Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	Р	В	Т	vPvB	vP	vB
epoxy resin (MW ≤ 700)	No	N/A	No	No	No	N/A	No
xylene	No	N/A	No	No	No	N/A	No
butan-1-ol	No	N/A	N/A	No	N/A	N/A	N/A
benzyl alcohol	No	N/A	No	No	No	N/A	No
2-methoxy-1-methylethyl acetate	No	N/A	N/A	No	N/A	N/A	N/A
hydrocarbons, c9-unsatd., polymd.	No	N/A	N/A	No	N/A	N/A	N/A
hydrocarbons, C9, aromatics	No	N/A	No	No	No	N/A	No
Phenol, methylstyrenated	No	N/A	N/A	No	SVHC (Recommend	Specified	Specified
Phenol, styrenated	No	N/A	N/A	No	N/A	N/A	N/A
2-Propenoic acid, reaction products with pentaerythritol	No	N/A	N/A	No	N/A	N/A	N/A
hexane-1,6-diol diacrylate	No	N/A	N/A	No	N/A	N/A	N/A

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

Product

SECTION 13: Disposal considerations

Methods of disposal	:	The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	:	Yes.
Disposal considerations	:	Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

European waste catalogue (EWC)

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

Waste code	Waste designation		
08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances		
Packaging			
Methods of disposal	packaging sho	n of waste should be avoided or minimised wherever possible. Waste buld be recycled. Incineration or landfill should only be considered g is not feasible.	
Disposal considerations	 S : Using information provided in this safety data sheet, advice should be obtained fr the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions. 		
Type of packaging		European waste catalogue (EWC)	
CEPE Guidelines	15 01 10*	packaging containing residues of or contaminated by hazardous substances	

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

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	Paint	Paint	Paint	Paint
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	111		111	111
14.5 Environmental hazards	No.	Yes.	No.	No.

SECTION 14: Transport information

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Additional information		
ADR/RID	1	<u>Hazard identification number</u> 30 <u>Tunnel code</u> (D/E)
		ADR/RID: Viscous substance. Not goods of class 3, ref. 2.2.3.1.5 (only applicable to receptacles < 450 litre capacity).
ADN	1	The product is only regulated as an environmentally hazardous substance when transported in tank vessels.
IMDG	:	<u>Emergency schedules</u> F-E, <u>S-E</u>
		IMDG: Viscous substance. Transport in accordance with 2.3.2.5 of the IMDG Code (only applicable to receptacles < 450 litre capacity).
UN	:	UN: Viscous substance. Not goods of class 3, ref. 2.3.2.5 (only applicable to receptacles < 450 litre capacity).
14.6 Special precautions for user	:	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
14.7 Maritime transport in bulk according to IMO instruments	:	Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

ngredient name	Status	Reference number	Date of revision
henol, methylstyrenated	Recommended	D(2023) 8585-DC	23.01.2024
: Not applicable.			
	e provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the oduct label and/or technical data sheet for further information.		
: Not available.	Not available.		
: Not listed			
: Not listed			
	 Phenol, methylstyrenated Not applicable. The provisions of Directive 2th product label and/or technication is not available. Not available. Not listed 	Phenol, methylstyrenated Recommended : Not applicable. : : The provisions of Directive 2004/42/EC on VOC apply to product label and/or technical data sheet for further infor : Not available. : Not listed	number Phenol, methylstyrenated Recommended D(2023) 8585-DC : Not applicable. : The provisions of Directive 2004/42/EC on VOC apply to this product. F product label and/or technical data sheet for further information. : Not available. : Not listed

SECTION 15: Regulatory information

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

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

National regulations

Industrial use

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

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

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15.2 Chemical safety : Not applicable. assessment

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SECTION 16: Other information

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Indicates information the second s	nat has changed from previously issued version.
Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.
	1272/2008]
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = CLP-specific Hazard statement
	N/A = Not available
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	SGG = Segregation Group
	vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

SECTION 16: Other information

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
Date of printing	: 29.05.2024
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revision	
Date of previous issue	e : 29.05.2024
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