according to Regulation (EC) No. 1907/2006



Commercial Product Name: ALEXSEAL X5154-Acrylic Topcoat X Quality No.: 4505X51549000

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

1.1 Product identifier

Trade name

: ALEXSEAL X5154-Acrylic Topcoat X 5154 Aristo Blue

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

Use of the Substance/Mixture

: Industrial serial painting

1.3 Details of the supplier of the safety data sheet

Producer

: Mankiewicz Gebr. & Co. (GmbH & Co. KG) Georg-Wilhelm-Strasse 189 21107 Hamburg Germany

Only for UK: Supplied by Mankiewicz UK LLP 26 Ashville Way, Whetstone, Leicester LE8 6NU United Kingdom

Telephone	:	+49 (0) 40 75103 0
Telefax	:	+49 (0) 40 75103 375
E-mail address of person	:	sdb_info@umco.de
responsible for the SDS		

1.4 Emergency telephone number

Emergency telephone num- : +44 1235 239670 (Carechem International) ber

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 127	2/2008)
Flammable liquids, Category 3	H226: Flammable liquid and vapour.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - single ex- posure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Long-term (chronic) aquatic hazard, Cat- egory 3	H412: Harmful to aquatic life with long lasting effects.

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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)					
Hazard pictograms	:				
Signal word	:	Warning			
Hazard statements	:	 H226 Flammable liquid and vapour. H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long lasting effects. 			
Supplemental Hazard Statements	:	EUH066 Repeated exposure may cause skin dryness or cracking.			
Precautionary statements	:	 Prevention: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing mist or vapours. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection. 			
		Response: P303 + P361 + P353 IF ON SKIN (or hair): Take off immedi- ately all contaminated clothing. Rinse skin with water. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.			

Hazardous components which must be listed on the label:

n-butyl acetate Hydrocarbons, C9, aromatics 2-methoxy-1-methylethyl acetate heptan-2-one reaction mass of a-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionylomega-hydroxypoly(oxyethylene) and a-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4hydroxyphenyl)propionyl-omega-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4hydroxyphenyl)propionyloxypoly(oxyethylene) Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6pentamethyl-4-piperidyl sebacate

Additional Labelling

EUH211

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Components			-
Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
n-butyl acetate	123-86-4 204-658-1 607-025-00-1 01-2119485493-29	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) EUH066	>= 5 - < 12.5
Hydrocarbons, C9, aromatics	64742-95-6 918-668-5 01-2119455851-35	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) STOT SE 3; H335 (Respiratory system) Asp. Tox. 1; H304 Aquatic Chronic 2; H411 EUH066	>= 5 - < 12.5
2-methoxy-1-methylethyl acetate	108-65-6 203-603-9 607-195-00-7 01-2119475791-29	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system)	>= 5 - < 12.5
heptan-2-one	110-43-0 203-767-1 606-024-00-3 01-2119902391-49	Flam. Liq. 3; H226 Acute Tox. 4; H302 Acute Tox. 4; H332 STOT SE 3; H336 (Central nervous system)	>= 1 - < 5
reaction mass of a-3-(3-(2H- benzotriazol-2-yl)-5-tert-butyl-4- hydroxyphenyl)propionyl-omega- hydroxypoly(oxyethylene) and a-	Not Assigned 400-830-7 607-176-00-3 01-0000015075-76	Skin Sens. 1; H317 Aquatic Chronic 2; H411	>= 0.5 - < 1



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3-(3-(2H-benzotriazol-2-yl)-5-tert-			
butyl-4-hydroxyphenyl)propionyl-			
omega-3-(3-(2H-benzotriazol-2-			
yl)-5-tert-butyl-4-			
hydroxy- phe-			
nyl)propionyloxypoly(oxyethylene)			
Reaction mass of bis(1,2,2,6,6-	1065336-91-5	Skin Sens. 1A; H317	>= 0.5 - < 1
pentamethyl-4-piperidyl) sebacate		Repr. 2; H361f	
and methyl 1,2,2,6,6-pentamethyl-	01-2119491304-40	Aquatic Acute 1;	
4-piperidyl sebacate		H400	
		Aquatic Acute 1; H400	
		Aquatic Chronic 1;	
		H410	
		Aquatic Chronic 1;	
		H410	
		M-Factor (Acute	
		aquatic toxicity): 1	
		M-Factor (Chronic	
		aquatic toxicity): 1	
4-hydroxy-4-methylpentan-2-one	123-42-2	Eye Irrit. 2; H319	>= 0.1 - < 0.25
	204-626-7	Repr. 2; H361d	
	603-016-00-1	STOT SE 3; H335	
	01-2119473975-21	(Respiratory system)	
		specific concentration	
		limit	
		Eye Irrit. 2; H319	
		>= 10 %	
		STOT RE 2; H319 >= 10 %	
		/ 10 /0	
Substances with a workplace expo			
titanium dioxide	13463-67-7		>= 1 - < 5
	236-675-5		
For explanation of abbreviations se	01-2119489379-17		

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	In all cases of doubt, or when sickness sy seek medica lattention. Never give anything by mouth to an uncor	• • •
If inhaled	Remove to fresh air, keep patient warm an Irregular breathing/no breathing: artificial r If unconscious place in recovery position a advice.	espiration.



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In case of skin contact	minated clothing immediately. ghly with soap and water or use recognised ents or thinners !
In case of eye contact	enses, irrigate copiously with clean, fresh 10 minutes, holding the eyelids apart and ice.
If swallowed	omiting. allowed obtain immediate medical attention. ng by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Risks	: May cause an allergic skin reaction.
	May cause drowsiness or dizziness.
	Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media		
Suitable extinguishing media	:	Alcohol resistant foam, CO2, powders
Unsuitable extinguishing media	:	High volume water jet
5.2 Special hazards arising from	the	e substance or mixture
Specific hazards during fire- fighting	:	Fire will produce dense black smoke. Exposure to decomposi- tion products may cause a health hazard.
5.3 Advice for firefighters		
Special protective equipment for firefighters	:	Appropriate breathing apparatus may be required.
Further information	:	Cool endangered containers with water in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

: Exclude sources of ignition and ventilate the area. Do not inhale vapours. Refer to protective measures listed in sections 7 and 8.

DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO

ENTER DRAINS OR WATER COURSES!!

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6.2 Environmental precautions

Environmental precautions Do not let product enter drains. : If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	 Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regula- tions (see chapter 13). Clean preferably with a detergent; avoid use of solvents.
-------------------------	--

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Advice on safe handling Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits. Comply with the health and safety at work laws. Smoking, eating and drinking should be prohibited in the application area. Observe specific national regulations for handling and use of paints. The product should only be used in areas from which all na-Advice on protection against 1 fire and explosion ked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use earthing leads whentransferring from one container to another. Operators should wear anti-static footwear and clothing. No sparking tools should be used. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Electrical equipment should be protected to the appropriate standard. Floors should be of the conducting type. Keep con- tainer tightly closed. Never use pressure to empty: container isnot a pressure vessel. No smoking. Prevent unauthorized access. Containers which are opened must be carefully re- sealed and kept upright to prevent leakage.
Further information on stor- age conditions	:	Always keep in containers of same material as the original one. See also instructions on the label. Avoid heating and direct sunlight. Keep container dry in a cool, well-ventilated place.
Advice on common storage	:	Keep away from oxidizing agents and strongly acid or alkaline

Advice on common storage Keep away from oxidizing agents and strongly acid or alkaline materials.



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Recommended storage tem- : 5 - 35 °C perature

7.3 Specific end use(s)

Specific use(s)

This information is not available. 2

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
n-butyl acetate	123-86-4	TWA	150 ppm 724 mg/m3	GB EH40
		STEL	200 ppm 966 mg/m3	GB EH40
		STEL	150 ppm 723 mg/m3	2019/1831/E U
	Further inform	nation: Indicative		
		TWA	50 ppm 241 mg/m3	2019/1831/E U
	Further inform	nation: Indicative		
2-methoxy-1- methylethyl ace- tate	108-65-6	STEL	100 ppm 550 mg/m3	2000/39/EC
	Further inform skin, Indicativ		possibility of significant upta	ke through the
		TWA	50 ppm 275 mg/m3	2000/39/EC
	Further inform skin, Indicativ		possibility of significant upta	ke through the
		TWA	50 ppm 274 mg/m3	GB EH40
		hose for which there	rbed through the skin. The as are concerns that dermal ab	
		STEL	100 ppm 548 mg/m3	GB EH40
		hose for which there	bed through the skin. The as are concerns that dermal ab	
heptan-2-one	110-43-0	TWA	50 ppm 238 mg/m3	2000/39/EC
	Further inform skin, Indicativ		possibility of significant upta	ke through the
		STEL	100 ppm 475 mg/m3	2000/39/EC
	Further inform skin, Indicativ		possibility of significant upta	ke through the

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		STEL	100 ppm 475 mg/m3	GB EH40
	Further inforn	nation: Can be absor	bed through the skin. The as	signed sub-
	stances are the	nose for which there	are concerns that dermal ab	sorption will
	lead to syster	nic toxicity.		
		TWA	50 ppm	GB EH40
			237 mg/m3	
	Further inforn	nation: Can be absor	bed through the skin. The as	signed sub-
	stances are the	nose for which there	are concerns that dermal ab	sorption will
	lead to syster	nic toxicity.		•
titanium dioxide	13463-67-7	TWA (inhalable dust)	10 mg/m3	GB EH40
		TWÁ (Respirable dust)	4 mg/m3	GB EH40
4-hydroxy-4- methylpentan-2- one	123-42-2	TWA	50 ppm 241 mg/m3	GB EH40
		STEL	75 ppm 362 mg/m3	GB EH40

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health ef- fects	Value
n-butyl acetate	Workers	Inhalation	Long-term systemic effects	300 mg/m3
	Workers	Dermal	Long-term systemic effects	11 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	35.7 mg/m3
	Consumers	Dermal	Long-term systemic effects	6 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	2 mg/kg bw/day
Hydrocarbons, C9, aromatics	Workers	Inhalation	Long-term systemic effects	150 mg/m3
	Workers	Dermal	Long-term systemic effects	25 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	32 mg/m3
	Consumers	Dermal	Long-term systemic effects	11 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	11 mg/kg bw/day
2-methoxy-1- methylethyl acetate	Workers	Inhalation	Long-term systemic effects	275 mg/m3
	Workers	Dermal	Long-term systemic effects	796 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	33 mg/m3
	Consumers	Dermal	Long-term systemic effects	320 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	36 mg/kg bw/day
heptan-2-one	Workers	Inhalation	Long-term systemic	394.25 mg/m3

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			effects	
	Workers	Dermal	Long-term systemic effects	54.27 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	84.31 mg/m3
	Consumers	Dermal	Long-term systemic effects	23.32 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	23.32 mg/kg bw/day
ethyl 3- ethoxypropionate	Workers	Skin contact	Long-term systemic effects	102 mg/kg bw/day
<u> </u>	Workers	Inhalation	Long-term systemic effects	610 mg/m3
	Consumers	Inhalation	Long-term systemic effects	72.6 mg/m3
	Consumers	Oral	Long-term systemic effects	1.2 mg/kg bw/day
	Consumers	Dermal	Long-term systemic effects	24.2 mg/kg bw/day
reaction mass of a-3- (3-(2H-benzotriazol-2- yl)-5-tert-butyl-4- hydroxy- phenyl)propionyl- omega- hydroxy- poly(oxyethylene) and a-3-(3-(2H- benzotriazol-2-yl)-5- tert-butyl-4- hydroxy- phenyl)propionyl- omega-3-(3-(2H- benzotriazol-2-yl)-5- tert-butyl-4- hydroxy- phe- nyl)propionyloxypoly(oxyethylene)	Workers	Inhalation	Long-term systemic effects	0.398 mg/m3
	Workers	Dermal	Long-term systemic effects	0.25 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0.099 mg/m3
	Consumers	Dermal	Long-term systemic effects	0.025 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	0.025 mg/kg bw/day
Reaction mass of bis(1,2,2,6,6- pentamethyl-4- piperidyl) sebacate and methyl 1,2,2,6,6- pentamethyl-4- piperidyl sebacate	Workers	Inhalation	Long-term systemic effects	1.27 mg/m3

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	Workers	Dermal	Long-term systemic effects	1.8 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0.31 mg/m3
	Consumers	Dermal	Long-term systemic effects	0.9 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	0.18 mg/kg bw/day
4-hydroxy-4- methylpentan-2-one	Workers	Inhalation	Long-term systemic effects	32.6 mg/m3
	Workers	Dermal	Long-term systemic effects	467 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	5.8 mg/m3
	Consumers	Dermal	Long-term systemic effects	167 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	1.67 mg/kg bw/day
n-butyl acetate	Workers	Inhalation	Long-term systemic effects	300 mg/m3
	Workers	Dermal	Long-term systemic effects	11 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	35.7 mg/m3
	Consumers	Dermal	Long-term systemic effects	6 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	2 mg/kg bw/day
Hydrocarbons, C9, aromatics	Workers	Inhalation	Long-term systemic effects	150 mg/m3
	Workers	Dermal	Long-term systemic effects	25 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	32 mg/m3
	Consumers	Dermal	Long-term systemic effects	11 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	11 mg/kg bw/day
2-methoxy-1- methylethyl acetate	Workers	Inhalation	Long-term systemic effects	275 mg/m3
	Workers	Dermal	Long-term systemic effects	796 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	33 mg/m3
	Consumers	Dermal	Long-term systemic effects	320 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	36 mg/kg bw/day
heptan-2-one	Workers	Inhalation	Long-term systemic effects	394.25 mg/m3
	Workers	Dermal	Long-term systemic effects	54.27 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	84.31 mg/m3

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	Consumers	Dermal	Long-term systemic effects	23.32 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	23.32 mg/kg bw/day
ethyl 3- ethoxypropionate	Workers	Skin contact	Long-term systemic effects	102 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	610 mg/m3
	Consumers	Inhalation	Long-term systemic effects	72.6 mg/m3
	Consumers	Oral	Long-term systemic effects	1.2 mg/kg bw/day
	Consumers	Dermal	Long-term systemic effects	24.2 mg/kg bw/day
reaction mass of a-3- (3-(2H-benzotriazol-2- yl)-5-tert-butyl-4- hydroxy- phenyl)propionyl- omega- hydroxy- poly(oxyethylene) and a-3-(3-(2H- benzotriazol-2-yl)-5- tert-butyl-4- hydroxy- phenyl)propionyl- omega-3-(3-(2H- benzotriazol-2-yl)-5- tert-butyl-4- hydroxy- phe- nyl)propionyloxypoly(oxyethylene)	Workers	Inhalation	Long-term systemic effects	0.398 mg/m3
	Workers	Dermal	Long-term systemic effects	0.25 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0.099 mg/m3
	Consumers	Dermal	Long-term systemic effects	0.025 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	0.025 mg/kg bw/day
Reaction mass of bis(1,2,2,6,6- pentamethyl-4- piperidyl) sebacate and methyl 1,2,2,6,6- pentamethyl-4- piperidyl sebacate	Workers	Inhalation	Long-term systemic effects	1.27 mg/m3
	Workers	Dermal	Long-term systemic effects	1.8 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0.31 mg/m3
	Consumers	Dermal	Long-term systemic	0.9 mg/kg

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			effects	bw/day
	Consumers	Oral	Long-term systemic effects	0.18 mg/kg bw/day
4-hydroxy-4- methylpentan-2-one	Workers	Inhalation	Long-term systemic effects	32.6 mg/m3
	Workers	Dermal	Long-term systemic effects	467 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	5.8 mg/m3
	Consumers	Dermal	Long-term systemic effects	167 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	1.67 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
n-butyl acetate	Fresh water	0.18 mg/l
	Marine water	0.0018 mg/l
	Fresh water sediment	0.981 mg/kg dry
		weight (d.w.)
	Marine sediment	0.098 mg/kg dry
		weight (d.w.)
	Sewage treatment plant	35.6 mg/l
	Soil	0.09 mg/kg dry
		weight (d.w.)
2-methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l
	Marine water	0.064 mg/l
	Fresh water sediment	3.29 mg/kg dry
		weight (d.w.)
	Marine sediment	0.329 mg/kg dry
		weight (d.w.)
	Sewage treatment plant	100 mg/l
	Soil	0.29 mg/kg dry
		weight (d.w.)
3-methoxybutyl acetate	Fresh water	0.007 mg/l
	Marine water	0.001 mg/l
	Fresh water sediment	0.041 mg/kg dry
		weight (d.w.)
	Marine sediment	0.004 mg/kg dry
		weight (d.w.)
	Sewage treatment plant	1000 mg/l
	Soil	0.004 mg/kg dry
		weight (d.w.)
heptan-2-one	Fresh water	0.098 mg/l
	Sewage treatment plant	12.5 mg/l
	Marine water	0.01 mg/l
	Soil	0.321 mg/kg dry
		weight (d.w.)
	Marine sediment	0.189 mg/kg dry
		weight (d.w.)
	Fresh water sediment	1.89 mg/kg dry
		weight (d.w.)
ethyl 3-ethoxypropionate	Fresh water	0.061 mg/l



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	Marine water	0.006 mg/l
	Sewage treatment plant	50 mg/l
	Fresh water sediment	0.419 mg/kg dry
		weight (d.w.)
	Marine sediment	0.042 mg/kg dry weight (d.w.)
	Soil	0.048 mg/kg dry
		weight (d.w.)
reaction mass of a-3-(3-(2H- benzotriazol-2-yl)-5-tert-butyl-4- hydroxyphenyl)propionyl-omega- hydroxypoly(oxyethylene) and a- 3-(3-(2H-benzotriazol-2-yl)-5-tert- butyl-4-hydroxyphenyl)propionyl- omega-3-(3-(2H-benzotriazol-2- yl)-5-tert-butyl-4- hydroxy- phe- nyl)propionyloxypoly(oxyethylene)	Fresh water	0.023 mg/l
_)	Marine water	0 mg/l
	Sewage treatment plant	100 mg/l
	Fresh water sediment	7.26 mg/kg dry weight (d.w.)
	Marine water	0.726 mg/kg dry weight (d.w.)
	Soil	14.52 mg/kg dry weight (d.w.)
Reaction mass of bis(1,2,2,6,6- pentamethyl-4-piperidyl) seba- cate and methyl 1,2,2,6,6- pentamethyl-4-piperidyl sebacate	Fresh water	0.002 mg/l
	Marine water	0 mg/l
	Sewage treatment plant	1 mg/l
	Fresh water sediment	1.05 mg/kg dry weight (d.w.)
	Marine sediment	0.11 mg/kg dry weight (d.w.)
	Soil	0.21 mg/kg dry weight (d.w.)
4-hydroxy-4-methylpentan-2-one	Fresh water	2 mg/l
	Marine water	0.2 mg/l
	Fresh water sediment	7.4 mg/kg dry weight (d.w.)
	Marine sediment	0.74 mg/kg dry weight (d.w.)
	Sewage treatment plant	10 mg/l
	Soil	0.31 mg/kg dry weight (d.w.)
n-butyl acetate	Fresh water	0.18 mg/l
	Marine water	0.0018 mg/l
	Fresh water sediment	0.981 mg/kg dry
		weight (d.w.)
	Marine sediment	0.098 mg/kg dry

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		weight (d.w.)
	Sewage treatment plant	35.6 mg/l
	Soil	0.09 mg/kg dry
		weight (d.w.)
2-methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l
· · · ·	Marine water	0.064 mg/l
	Fresh water sediment	3.29 mg/kg dry
		weight (d.w.)
	Marine sediment	0.329 mg/kg dry
		weight (d.w.)
	Sewage treatment plant	100 mg/l
	Soil	0.29 mg/kg dry
		weight (d.w.)
3-methoxybutyl acetate	Fresh water	0.007 mg/l
	Marine water	0.001 mg/l
	Fresh water sediment	0.041 mg/kg dry
		weight (d.w.)
	Marine sediment	0.004 mg/kg dry
		weight (d.w.)
	Sewage treatment plant	1000 mg/l
	Soil	0.004 mg/kg dry
		weight (d.w.)
heptan-2-one	Fresh water	0.098 mg/l
	Sewage treatment plant	12.5 mg/l
	Marine water	0.01 mg/l
	Soil	0.321 mg/kg dry
		weight (d.w.)
	Marine sediment	0.189 mg/kg dry
		weight (d.w.)
	Fresh water sediment	1.89 mg/kg dry
		weight (d.w.)
ethyl 3-ethoxypropionate	Fresh water	0.061 mg/l
	Marine water	0.006 mg/l
	Sewage treatment plant	50 mg/l
	Fresh water sediment	0.419 mg/kg dry
		weight (d.w.)
	Marine sediment	0.042 mg/kg dry
		weight (d.w.)
	Soil	0.048 mg/kg dry
		weight (d.w.)
reaction mass of a-3-(3-(2H-	Fresh water	0.023 mg/l
benzotriazol-2-yl)-5-tert-butyl-4-		0.0 <u> </u>
hydroxyphenyl)propionyl-omega-		
hydroxypoly(oxyethylene) and a-		
3-(3-(2H-benzotriazol-2-yl)-5-tert-		
butyl-4-hydroxyphenyl)propionyl-		
omega-3-(3-(2H-benzotriazol-2-		
yl)-5-tert-butyl-4-		
hydroxy-		
phe-		
nyl)propionyloxypoly(oxyethylene		
)		
-	Marine water	0 mg/l
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	Sewage treatment plant	100 mg/l
	Fresh water sediment	7.26 mg/kg dry weight (d.w.)
	Marine water	0.726 mg/kg dry weight (d.w.)
	Soil	14.52 mg/kg dry weight (d.w.)
Reaction mass of bis(1,2,2,6,6- pentamethyl-4-piperidyl) seba- cate and methyl 1,2,2,6,6- pentamethyl-4-piperidyl sebacate	Fresh water	0.002 mg/l
	Marine water	0 mg/l
	Sewage treatment plant	1 mg/l
	Fresh water sediment	1.05 mg/kg dry weight (d.w.)
	Marine sediment	0.11 mg/kg dry weight (d.w.)
	Soil	0.21 mg/kg dry weight (d.w.)
4-hydroxy-4-methylpentan-2-one	Fresh water	2 mg/l
	Marine water	0.2 mg/l
	Fresh water sediment	7.4 mg/kg dry weight (d.w.)
	Marine sediment	0.74 mg/kg dry weight (d.w.)
	Sewage treatment plant	10 mg/l
	Soil	0.31 mg/kg dry weight (d.w.)

8.2 Exposure controls

Engineering measures

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 aerosol- and solvent vapours concentration below the OEL, suitable respiratory protection must be worn.

Personal protective equipme Eye/face protection		Wear safety goggles to protect against solvent splashes.
Hand protection		
Remarks	:	Adhere to the professional organisation rule "Use of protec- tive gloves". Appropriate chemicals resistant glove tested in compliance with EN 374. Recommendation for protection against components general- ly found in the products:
		For short-term contact (i.e. splash protection): Appropriate material: nitrile rubber, Neoprene Material thickness: > 0,4 mm Breakthrough time: > 480 min

Before use, the protective glove should be tested in any case

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	for its specific work-station suitability (i.e. mechanical re- sistance, product compatibility and antistatic properties). I here to the manufacturer's instructions and information re- ing to the use, storage, care and replacement of protectiv gloves. Protective gloves shall be replaced immediately w physically damaged or worn. Preventive hand protection of protection cream) recommended. Wash immediately cont- inated skin. Design operations thus to avoid permanent u of protective gloves.	elat- ve vhen (skin tam-
Skin and body protection	Depending on the probability of the occurrence of danger ly explosive atmospheres, adapted protective clothing mu be worn.	
Respiratory protection	If the solvent concentration is above the air limit values, a breathing apparatus approved for this purpose must be w Use half-mask model with cartridge or air-fed. Dry grinding, torch cutting and/or welding however can pr duce hazardous dust and/or vapour. If possible, machine employing a wet medium. Where practicable, install exhaust hoods to improve captor vapours and fumes and avoid exposition; otherwise wear piratory protection equipment.	vorn ro- ure of
Protective measures	Do not eat or drink during work - no smoking. Avoid product contact with skin, eyes and clothing. Avoid the inhalation of dust from sanding, particulates and spray mist arising from the application of this preparation. When operators, whether spraying or not, have to work in the spray booth, ventilation is unlikely to be sufficient to c trol particulates and solvent vapour in all cases. In such c cumstances they should wear a compressed air-fed respi tor during the spraying process until such time as the part lates and solvent vapour concentration has fallen below the exposure limits.	nside con- cir- ira- ticu-

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: liquid
Colour	: according product name
Odour	: characteristic
Boiling point/boiling range	: ca. 120 °C
Upper explosion limit	: 10 %(V)
Lower explosion limit	: 1 %(V)
Flash point	: 35 °C

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Mothod: ISO 12726

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			Method: ISO 13736
	Auto-ignition temperature	:	> 400 °C
	рН	:	4 - 6 (20 °C) Concentration: 10 %
	Viscosity		
	Viscosity, kinematic	:	> 21 mm²s
	Flow time	:	> 150 s Cross section: 4 mm Method: DIN 53211
			> 100 s Cross section: 6 mm Method: ISO 2431
	Solubility(ies) Water solubility	:	insoluble
	Vapour pressure	:	ca. 100 hPa (50 °C)
	Density	:	ca. 1.2 g/cm3 (20 °C)
9.2	Other information		
	Miscibility with water	:	immiscible
	Solvent separation	:	< 3 %(V)

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous re	actio	ns
Hazardous reactions	•	No dangerous reaction known under conditions of normal use. There are no data available on the preparation itself.
10.4 Conditions to avoid		
Conditions to avoid	:	Stable under recommended storage and handling conditions (See section 7).
10.5 Incompatible materials		
Materials to avoid	:	Keep away from oxidizing agents, strongly alkaline and

strongly acid materials in order to avoid exothermic reactions.





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10.6 Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

SECTION 11: Toxicological information

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

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity	:	Acute toxicity estimate: > 2,000 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: > 20 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method

Components:

heptan-2-one:

Acute oral toxicity	:	LD50 (Rat): 1,600 mg/kg
Acute inhalation toxicity	:	LC50 (Rat, male and female): 16.7 mg/l Exposure time: 4 h Test atmosphere: vapour

4-hydroxy-4-methylpentan-2-one:

Acute oral toxicity	:	LD50 (Rat): 3,002 mg/kg
Acute dermal toxicity	:	LD50 (Rabbit): 13,630 mg/kg

Skin corrosion/irritation

Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation

Not classified based on available information.

Components:

4-hydroxy-4-methylpentan-2-one:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Eye irritation

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

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Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Further information

Product:

Remarks

Exposure of vapour concentration in excess of the stated OEL's may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue muscular weakness, drowsiness and in extrem cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in nonallergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage.

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SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology Assessment Acute aquatic toxicity	:	There are no data available on the preparation itself.
Components:		
Hydrocarbons, C9, aromatics	s:	
Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 3.2 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	ErC50 (Raphidocelis subcapitata (freshwater green alga)): 2.9 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Reaction mass of bis(1,2,2,6, pentamethyl-4-piperidyl seba		pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6- tte:
Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.97 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 20 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 1.68 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: The product has low solubility in the test medium. An aqueous dispersion was tested.
M-Factor (Acute aquatic tox- icity)	:	1
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	NOEC: 1 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211 Remarks: The product has low solubility in the test medium. An aqueous dispersion was tested.
M-Factor (Chronic aquatic toxicity) ewicz Gebr. & Co. (GmbH & Co. KG) Bank Name Ort K	: (toNr	BLZ BIC IBAN Sitz/Registergericht Hamburg: HRA 42442 Bureau Veritas



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12.2 Persistence and degradability

Product:

Remarks: There are no data available on the preparation it-Biodegradability : self.

12.3 Bioaccumulative potential

Product:

Bioaccumulation Remarks: There are no data available on the preparation it-: self.

12.4 Mobility in soil

- Product:
- Mobility Remarks: There are no data available on the preparation it-2 self.

12.5 Results of PBT and vPvB assessment

Product:	
Assessment	: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
	: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:	
Assessment	 The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological infor-	:	There are no data available on the preparation itself.
mation		

The product should not be allowed to enter drains or water courses.

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 DESS 2007 0000 0600 2273 00
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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Dispose of in accordance with local regulations.
Contaminated packaging	:	Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

SECTION 14: Transport information

14.1 UN number or ID number

ADR	:	UN 1263
IMDG	:	UN 1263
ΙΑΤΑ	:	UN 1263
14.2 UN proper shipping name		
ADR	:	PAINT
IMDG	:	PAINT
ΙΑΤΑ	:	PAINT

14.3 Transport hazard class(es)

		Class
ADR	:	3
IMDG	:	3
ΙΑΤΑ	:	3

14.4 Packing group

A	D	R	

ADR Packing group Classification Code Hazard Identification Number Labels Tunnel restriction code Remarks	•	III F1 30 3 (D/E) If transported within the user's premises: To be transported always in closed, upright and safe containers. Make sure that persons handling these containers are aware of the rules of conduct in case of incident or spillage.
IMDG Packing group Labels EmS Code IATA (Cargo)	:	III 3 <u>F-E, S-E</u>
		BLZ BIC IBAN Sttz/Registergericht Hamburg: HRA 42442 Bureau Veritas 900 2007 700 00 DEUTDEHHOX DE58 2007 0000 0600 2273 00 Persönlich hatende Gesellschafterin: Certification: 900 2000 700 00 DEUTDEHHOX DE58 2007 0000 0600 2273 00 Persönlich hatende Gesellschafterin: Certification:

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Subsidiary risks



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aircraft) Packing group Labels	:	III Flammable Liquids
IATA (Passenger) Packing instruction (passen- ger aircraft)	:	355
Packing instruction (LQ) Packing group Labels		Y344 III Flammable Liquids
14.5 Environmental hazards		
ADR Environmentally hazardous	:	no
IMDG Marine pollutant	:	no
14.6 Special precautions for us	er	
Remarks	:	ADR: Receptacles with less than 450 litres capacity, are not subject to ADR (see ADR 2.2.3.1.5) IMDG: Receptacles with less than 450 litres capacity, are not subject to the regulations of IMDG chapters 4.1, 5.2 and 6.1 (see IMDG 2.3.2.5)

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the fol- lowing entries should be considered: Number on list 3		
UK REACH List of substances subject to authorisation : Not applicable (Annex XIV)				
	-	4 November 2010 on industrial		

emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 35.16 %, 422 g/l VOC content excluding water



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Other regulations:

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the mixture.

SECTION 16: Other information

Full text of H-Statements

H226 H302 H304 H317 H319 H332 H335 H336 H361d H361d		Flammable liquid and vapour. Harmful if swallowed. May be fatal if swallowed and enters airways. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child. Suspected of damaging fertility.			
H400	÷	Very toxic to aquatic life.			
H410 H411	÷	Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects.			
EUH066	:	Repeated exposure may cause skin dryness or cracking.			
	•				
Full text of other abbreviations					
Acute Tox.	:	Acute toxicity			
Aquatic Acute	:	Short-term (acute) aquatic hazard			
Aquatic Chronic	:	Long-term (chronic) aquatic hazard			
Asp. Tox.	:	Aspiration hazard			
Eye Irrit.	:	Eye irritation			
Flam. Liq.	:	Flammable liquids			
Repr.	:	Reproductive toxicity			
Skin Sens.	:	Skin sensitisation			
STOT SE	:	Specific target organ toxicity - single exposure			
2000/39/EC	:	Europe. Commission Directive 2000/39/EC establishing a first			
2019/1831/EU	:	list of indicative occupational exposure limit values Europe. Commission Directive 2019/1831/EU establishing a fifth list of indicative occupational exposure limit values			
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits			
2000/39/EC / TWA	:	Limit Value - eight hours			
2000/39/EC / STEL	:	Short term exposure limit			
2019/1831/EU / TWA	:	Limit Value - eight hours			
2019/1831/EU / STEL	:	Short term exposure limit			
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)			
GB EH40 / STEL	:	Short-term exposure limit (15-minute reference period)			

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergen-

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cy Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIOC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information

The information given in this material safety data sheet does not release the user from its duty of risk assessment and control in the work place defined in other health and safety law. Adhere to the national sanitary and occupational safety regulations when using this product.

This safety datasheet complies with the requirements of regulation (EC) No 1907/2006(2020/878).

Classification of the mix	cture:	Classification procedure:
Flam. Liq. 3	H226	Based on product data or assessment
Skin Sens. 1	H317	Calculation method
STOT SE 3	H336	Calculation method
Aquatic Chronic 3	H412	Calculation method

Department issuing safety data sheet

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific



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material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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