

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

1.1 Product identifier	
Product name	: Hardtop Clear Comp A
UFI	: QTJU-J2C3-N00E-JSWV
Product code	: 31982
Product description	: Paint.
Product type	: Liquid.
Other means of identification	: Not available.
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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 Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H336 Aquatic Chronic 3, H412 The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

Hardtop Clear Comp A

SECTION 2: Hazards identification

See Section 16 for the full text of the H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

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2.2 Label elements

Hazard pictograms



Signal word	1	Warning.
Hazard statements	:	 H226 - Flammable liquid and vapour. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements		
General	1	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 vapour.
Response	:	 P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. 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 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
Storage	1	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	:	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	:	n-butyl acetate xylene decanedioic acid, 1,10-bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester, mixt. with 1-methyl 10-(1,2,2,6,6-pentamethyl-4-piperidinyl) decanedioate 2-Hydroxyethyl methacrylate
Supplemental label elements	1	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Special packaging requirem	ien	<u>ts</u>
Containers to be fitted with child-resistant fastenings		Not applicable.
Tactile warning of danger	:	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

: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do : None known. not result in classification

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	-	[1] [2]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - <20	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)] = 20 mg/ I	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	<10	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)] = 17.8 mg/l	[1] [2]
a mixture of branched and linear c7-c9 alkyl-3-[3-(2h- benzotriazol-2-yl)-5- (1,1-dimethylethyl) -4-hydroxyphenyl] propionates	REACH #: 01-0000015648-61 EC: 407-000-3 CAS: 127519-17-9 Index: 607-281-00-4	≤3	Aquatic Chronic 2, H411	-	[1]
decanedioic acid, 1,10-bis (1,2,2,6,6-pentamethyl- 4-piperidinyl) ester, mixt. with 1-methyl 10- (1,2,2,6,6-pentamethyl- 4-piperidinyl) decanedioate	CAS: 1065336-91-5	≤1	Skin Sens. 1A, H317 Repr. 2, H361f Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
2-Hydroxyethyl methacrylate	EC: 212-782-2 CAS: 868-77-9 Index: 607-124-00-X	≤0.3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 See Section 16 for the full text of the H statements declared above.	-	[1]

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. <u>Type</u>

SECTION 3: Composition/information on ingredients

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid me	easures
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	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
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.
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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains decanedioic acid, 1,10-bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester, mixt. with 1-methyl 10-(1,2,2,6,6-pentamethyl-4-piperidinyl) decanedioate, 2-hydroxyethyl methacrylate. May produce an allergic reaction.

Over-exposure signs/symptoms Eve contact Adverse symptoms may include the following:

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Ingestion	: No specific	data.		
Skin contact	: Adverse sy irritation redness	mptoms may include the	following:	
	headache drowsiness dizziness/v unconsciou	s/fatigue ertigo	ionowing.	
Inhalation	pain or irrita watering redness		C C	

SECTION 4: First aid measures

4.3 Indication of any immediate 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 f	om 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	: Cool closed containers exposed to fire with water. Do not release runoff from fire to

for fire-fighters	drains or watercourses.
Special protective equipment for fire-fighters	: Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	ote	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.

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

Hardtop Clear Comp A

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

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.Not available.

Industrial sector specific solutions

SECTION 8: Exposure controls/personal protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

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SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
n-butyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020).
	STEL: 966 mg/m ³ 15 minutes.
	STEL: 200 ppm 15 minutes.
	TWA: 724 mg/m ³ 8 hours.
	TWA: 150 ppm 8 hours.
xylene	EH40/2005 WELs (United Kingdom (UK), 1/2020). 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.
ethylbenzene	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.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
n-butyl acetate	DNEL	Short term	960 mg/m ³	Workers	Systemic
	DNEL	Inhalation Short term Inhalation	960 mg/m³	Workers	Local
	DNEL	Long term Inhalation	480 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	480 mg/m³	Workers	Local
	DNEL	Short term Inhalation	859.7 mg/ m³	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	859.7 mg/ m³	General population [Consumers]	Local
	DNEL	Long term Inhalation	102.34 mg/ m ³	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	102.34 mg/ m³	General population [Consumers]	Local
	DNEL	Short term Oral	2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	2 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	6 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	11 mg/kg bw/day	Workers	Systemic
	DNEL	Long term	35.7 mg/m ³	General	Local

		Inhalation		population	
	DNEL	Short term	300 mg/m ³	General	Local
	DINCE	Inhalation	ooo mg/m	population	Loodi
	DNEL	Short term	300 mg/m ³	General	Systemic
	DITE	Inhalation	ooo mg/m	population	eyetenne
	DNEL	Long term	300 mg/m ³	Workers	Local
		Inhalation	J		
	DNEL	Short term	600 mg/m ³	Workers	Local
		Inhalation	Ū		
	DNEL	Short term	600 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Long term Dermal	3.4 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	7 mg/kg	Workers	Systemic
			bw/day	a 1	
	DNEL	Long term	12 mg/m ³	General	Systemic
	DNE	Inhalation	10 1 3	population	
	DNEL	Long term	48 mg/m ³	Workers	Systemic
dono	DNEL	Inhalation	65.2 malm3	Concrel	
ylene	DINEL	Long term Inhalation	65.3 mg/m ³	General population	Local
	DNEL	Short term	260 mg/m ³	General	Local
		Inhalation	200 mg/m	population	
	DNEL	Short term	260 mg/m ³	General	Systemic
		Inhalation	,	population	-) - ! - ! - ! - ! - ! - ! - ! - ! - !
	DNEL	Long term	221 mg/m ³	Workers	Local
		Inhalation	0		
	DNEL	Long term Oral	12.5 mg/	General	Systemic
			kg bw/day	population	
	DNEL	Long term	65.3 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Long term Dermal	125 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	212 mg/kg	Workers	Systemic
			bw/day		Curatanaia
	DNEL	Long term	221 mg/m ³	Workers	Systemic
	DNEL	Inhalation Short term	442 mg/m ³	Workers	Local
	DNEL	Inhalation	442 mg/m	WORKERS	LUCAI
	DNEL	Short term	442 mg/m ³	Workers	Systemic
		Inhalation	· · _ · ··g/		0,0001110
thylbenzene	DNEL	Long term Oral	1.6 mg/kg	General	Systemic
-			bw/day	population	
	DNEL	Long term	15 mg/m ³	General	Systemic
		Inhalation	-	population	
	DNEL	Long term	77 mg/m³	Workers	Systemic
		Inhalation	100		
	DNEL	Long term Dermal	180 mg/kg	Workers	Systemic
		Chart to me	bw/day	\\/orl/ara	
	DNEL	Short term	293 mg/m ³	Workers	Local
	DMEL	Inhalation	$112 m c/m^{3}$	Workers	
		Long term Inhalation	442 mg/m ³	VVUIKEIS	Local
	DMEL	Short term	884 mg/m³	Workers	Systemic
		Inhalation	50+ mg/m		Cysternie
mixture of branched and linear	DNEL	Long term Oral	0.0033 mg/	General	Systemic
7-c9 alkyl-3-[3-(2h-benzotriazol-			kg bw/day	population	- ,
-yl)-5-(1,1-dimethylethyl)				1	
1-hydroxyphenyl]propionates					
	DNEL	Long term Dermal	0.00333	General	Systemic
			mg/kg bw/	population	,
			day		
	DNEL	Long term	0.0057 mg/	General	Systemic
	1	5	· · · · · · · · · · · · · · · · · · ·		,

SECTION 8: Exposure controls/personal protection

SECTION 8: Exposure cont	1015/p	ersonal prote	Clion		
	DNEL	Inhalation Long term Dermal	m³ 0.165 mg/	population Workers	Systemic
	DNEL	Long term	kg bw/day 0.35 mg/m³	Workers	Systemic
		Inhalation	-		-
decanedioic acid, 1,10-bis (1,2,2,6,6-pentamethyl-4-piperidinyl) ester, mixt. with 1-methyl 10- (1,2,2,6,6-pentamethyl-4-piperidinyl) decanedioate	DNEL	Long term Oral	0.18 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.31 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	0.9 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1.27 mg/m ³		Systemic
	DNEL	Long term Dermal	1.8 mg/kg bw/day	Workers	Systemic
2-Hydroxyethyl methacrylate	DNEL	Long term Oral	0.83 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.83 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1.3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	2.9 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	4.9 mg/m ³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
n-butyl acetate	Fresh water	0.18 mg/l	-
	Marine	0.018 mg/l	-
	Sewage Treatment	35.6 mg/l	-
	Plant		
	Fresh water sediment	0.981 mg/kg dwt	-
	Marine water sediment	0.0981 mg/kg dwt	
	Soil	0.0903 mg/kg dwt	-
xylene	Fresh water	0.327 mg/l	-
	Marine	0.327 mg/l	-
	Sewage Treatment	6.58 mg/l	-
	Plant		
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-
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	-

8.2 Exposure controls

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 measures

SECTION 8: Exposure controls/personal protection

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.

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.

Not recommended, gloves(breakthrough time) < 1 hour: Viton® (> 0.7 mm), neoprene (> 0.35 mm), PVC (> 0.5 mm)

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

May be used, gloves(breakthrough time) 4 - 8 hours: butyl rubber (> 0.4 mm), nitrile rubber (> 0.4 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	: 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

Physical state	: Liquid.	
Colour	: Clear.	
Odour	: Characteristic.	

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 : 27.03.2023
 Date of previous issue
 : No previous validation
 Version
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SECTION 9: Physical and chemical properties

Odour threshold	Not applicable.	
Melting point/freezing point	Not applicable.	
Initial boiling point and boiling range	Lowest known value: 126°C (258.8°F) (n-butyl acetate). Weighted average: 131.28°C (268.3°F)	
Flammability	Not applicable.	
Lower and upper explosion limit	0.8 - 7.6%	
Flash point	Closed cup: 26°C	
Auto-ignition temperature	Lowest known value: 415°C (779°F) (n-butyl acetate).	
Decomposition temperature	Not available.	
рН	Not applicable.	
Viscosity	Kinematic (40°C): >20.5 mm²/s	
Solubility in water	cold water Not soluble hot water Not soluble	
Partition coefficient: n-octanol/ water	Not available.	
Vapour pressure	Highest known value: 1.5 kPa (11.3 mm Hg) (at 20°C) (n-butyl acetate). Weighted average: 1.23 kPa (9.23 mm Hg) (at 20°C)	
Evaporation rate	Highest known value: 1 (n-butyl acetate) Weighted average: 0.89compared with butyl acetate	h
Density	0.992 g/cm³	
Vapour density	Highest known value: 4 (Air = 1) (n-butyl acetate). Weighted average: 3.84 (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	:	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:	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	1	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.

SECTION 11: Toxicological information

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

SECTION 11: Toxicological information

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness,

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains decanedioic acid, 1,10-bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester, mixt. with 1-methyl 10-

(1,2,2,6,6-pentamethyl-4-piperidinyl) decanedioate, 2-hydroxyethyl methacrylate. May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-butyl acetate	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
-	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	13100 mg/kg	-
xylene	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours
-	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat - Male	17.8 mg/l	4 hours
-	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
2-Hydroxyethyl methacrylate	LD50 Oral	Rat	5050 mg/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)
Hardtop Clear Comp A	N/A	5624.2	N/A	74.4	N/A
n-butyl acetate	13100	N/A	N/A	N/A	N/A
xylene	4300	1100	N/A	20	N/A
ethylbenzene	3500	N/A	N/A	17.8	N/A
2-Hydroxyethyl methacrylate	5050	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Eyes - Mild irritant Skin - Mild irritant	Rabbit Rat	-	87 milligrams 8 hours 60 microliters	-
2-Hydroxyethyl methacrylate	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Mammal - species unspecified	-	-	-

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
2-Hydroxyethyl methacrylate	skin	Mammal - species unspecified	Sensitising

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SECTION 11: Toxicological information

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
n-butyl acetate xylene	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation

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

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
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	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
a mixture of branched and linear c7-c9 alkyl-3-[3-(2h- benzotriazol-2-yl)-5- (1,1-dimethylethyl) -4-hydroxyphenyl] propionates	LC50 10 mg/l	Fish	96 hours
decanedioic acid, 1,10-bis	Acute EC50 1.68 mg/l	Algae	96 hours
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Hardtop Clear Comp A			
SECTION 12: Ecolog	ical information		
(1,2,2,6,6-pentamethyl- 4-piperidinyl) ester, mixt. with 1-methyl 10- (1,2,2,6,6-pentamethyl- 4-piperidinyl) decanedioate	Acute LC50 0.9 mg/l Chronic NOEC 1 mg/l	Fish Daphnia	96 hours 21 days

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
xylene ethylbenzene	-	-	Readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate	2.3	-	low
xylene	3.12	8.1 to 25.9	low
ethylbenzene	3.6	-	low
2-Hydroxyethyl methacrylate	0.42	-	low

12.4 Mobility in soil	
Soil/water partition coefficient (K _{oc})	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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 method Product	ods
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.

Hardtop Clear Comp A		
SECTION 13: Dispo	sal consider	ations
Disposal considerations	Dispose of ac If this product longer apply a	to enter drains or watercourses. coording to all federal, state and local applicable regulations. is mixed with other wastes, the original waste product code may no and the appropriate code should be assigned. formation, contact your local waste authority.
European waste catalog	ue (EWC)	
The European Waste Cata	logue classification	of this product, when disposed of as waste, is:
Waste code		Waste designation
08 01 11*	Waste paint and v	arnish containing organic solvents or other dangerous substances
Packaging		
Methods of disposal	packaging sh	on of waste should be avoided or minimised wherever possible. Waste ould be recycled. Incineration or landfill should only be considered g is not feasible.
Disposal considerations	the relevant v Empty contai	ation provided in this safety data sheet, advice should be obtained from vaste authority on the classification of empty containers. ners must be scrapped or reconditioned. ontainers contaminated by the product in accordance with local or 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	III		111
14.5 Environmental hazards	No.	Yes.	No.	No.

ADR/RID: Viscous substance. Not restricted, ref. chapter 2.2.3.1.5 (applicable to receptacles < 450 litre capacity).

ADN : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.

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SECTION 14: Transport information

IMDG	1	<u>Emergency schedules</u> F-E, <u>S-E</u>
		IMDG: Viscous substance. Transport in accordance with paragraph 2.3.2.5 (applicable to receptacles < 450 litre capacity).
		Segregation Group: Not Applicable
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			
EU Regulation (EC) No. 190			
Annex XIV - List of substances subject to authorisation			
Annex XIV			
None of the components a	are listed.		
Substances of very high	<u>concern</u>		
None of the components a	are listed.		
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.		
Other EU regulations			
VOC	: The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.		
VOC for Ready-for-Use Mixture	: Not available.		
Industrial emissions (integrated pollution prevention and control) - Air	: Not listed		
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed		

Ozone depleting substances (1005/2009/EU)

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

SECTION 15: Regulatory information

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 Conve	ention List Schedules I, II & III Chemicals
Not listed.	
Montreal Protocol Not listed.	
Stockholm Convention of Not listed.	n Persistent Organic Pollutants
Rotterdam Convention o Not listed.	n Prior Informed Consent (PIC)
UNECE Aarhus Protocol	on POPs and Heavy Metals

Not listed.

15.2 Chemical safety : Not applicable.

assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.

: ATE = Acute Toxicity Estimate
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 Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.

SECTION 16: Other information

H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
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 Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
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 Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
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