SAFETY DATA SHEET



MegaPrimer HS Comp A

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

1.1 Product identifier	
Product name	: MegaPrimer HS Comp A
Product code	: 43722
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	Jotun Paints (Europe) Ltd. Stather Road Flixborough, Scunthorpe North Lincolnshire DN15 8RR England
E-mail: SDSJotun@jotun.no	Tel: +44 17 24 40 00 00 Fax: +44 17 24 40 01 00
1.4 Emergency telephone nu	umber
National advisory body/Po	ison Centre
Telephone number	: Contact NHS Direct; phone 0845 4647 or 111. Open 24/7.

Supplier

Telephone number

: +47 33 45 70 00 Jotun Norway (head office)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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.

2.2 Label elements

SECTION 2: Hazards identification

Hazard pictograms	
Signal word	: Danger.
Hazard statements	 H225 - Highly flammable liquid and vapour. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H411 - Toxic 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 vapour.
Response	 P391 - Collect spillage. 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	: Not applicable.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: EUH205 - Contains epoxy constituents. May produce an allergic reaction. EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Special packaging requirem	ents
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not applicable.
2.3 Other hazards	
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 not result in classification	: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : N	Mixture			_
Product/ingredient name	Identifiers	%	Classification	Туре
epoxy-formaldehyde resin (MW<700)	REACH #: 01-2119454392-40 EC: 500-006-8 CAS: 9003-36-5	≥10 - ≤25	Skin Irrit. 2, H315 Skin Sens. 1A, H317 Aquatic Chronic 2, H411	[1]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 Index: 022-006-00-2	≥10 - ≤25	Carc. 2, H351 (inhalation)	[1] [*]
butanone	REACH #: 01-2119457290-43 EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3	≤10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1] [2]
epoxy resin (MW ≤ 700)	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2	≤10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	[1]
Oxirane, 2-(chloromethyl)-, polymer with α-hydro-ω- hydroxypoly[oxy(methyl- 1,2-ethanediyl)]	CAS: 9072-62-2	≤5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]
1,2-Ethanediamine, polymer with aziridine, reaction product with 2-propenoic acid, 2-ethylhexyl ester, salt with oxirane, methyl-, polymer with oxirane, monobutyl ether, phosphate	REACH #: 01-2119485289-22 CAS: 398475-96-2	≤3	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	[1]
silane, trimethyoxy[3-(oxiranyl- methoxy)propyl]-	REACH #: 01-2119513212-58 EC: 219-784-2 CAS: 2530-83-8	<3	Eye Dam. 1, H318 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. <u>Type</u>

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter \leq 10 µm not bound within a matrix. Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

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SECTION 4: First aid measures		
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.	
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.	
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.	
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. 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 or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

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 from the substance or mixture

SECTION 5: Firefighting measures

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: Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
: Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides metal oxide/oxides
: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	te	ctive equipment and emergency procedures
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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	:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
6.3 Methods and material for	со	ntainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
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

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

	Notification and MAPP threshold	Safety report threshold	
P5c	5000 tonne	50000 tonne	
E2	200 tonne	500 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

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values		
vutanone	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 899 mg/m ³ 15 minutes.		
	STEL: 300 ppm 15 minutes. TWA: 600 mg/m ³ 8 hours. TWA: 200 ppm 8 hours.		

Biological exposure indices

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure indices
butanone	EH40/2005 BMGVs (United Kingdom (UK), 8/2018) BGV: 70 µmol/l, butan-2-one [in urine]. Sampling time: post shift.
Recommended monitoring : Reference shou	Id be made to appropriate monitoring standards. Reference to

procedures

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
epoxy-formaldehyde resin (MW<700)	DMEL	Short term Dermal	8.3 µg/cm²	Workers	Local
	DNEL	Long term Oral	6.25 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	8.7 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	29.39 mg/ m³	Workers	Systemic
	DNEL	Long term Dermal	62.5 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	104.15 mg/	Workers	Systemic
titanium dioxide	DNEL	Long term Inhalation	28 µg/m ³	General population	Local
	DNEL	Long term Inhalation	170 µg/m³	Workers	Local
butanone	DNEL	Long term Dermal	1161 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	600 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	412 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	106 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Oral	31 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Oral	31 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	106 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	412 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	450 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	600 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	900 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	1161 mg/ kg bw/day	Workers	Systemic
epoxy resin (MW ≤ 700)	DNEL	Long term Dermal	89.3 µg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.75 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.87 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	4.93 mg/m ³		Systemic

SECTION 8: Exposure controls/personal protection

silane, trimethyoxy[3-(oxiranyl-	DNEL	Long term Oral	5 mg/kg	General	Systemic
methoxy)propyl]-	DINLL		bw/day	population	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	10 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	17 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	70.5 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	26400 mg/ m ³	General population	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
butanone	Fresh water	55.8 mg/l	-
	Marine	55.8 mg/l	-
	Sewage Treatment Plant	709 mg/l	-
	Fresh water sediment	284.74 mg/kg dwt	-
	Marine water sediment	284.7 mg/kg dwt	-
	Soil	22.5 mg/kg dwt	-
	Secondary Poisoning	1000 mg/kg	-
epoxy resin (MW ≤ 700)	Fresh water	0.006 mg/l	-
	Marine	0.0006 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	0.996 mg/l	-
	Marine water sediment	0.0996 mg/l	-
	Soil	0.196 mg/l	-

.2 Exposure controls	
Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Individual protection measu	<u>res</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.
Skin protection	
Hand protection	
combination of chemicals.	erial or combination of materials that will give unlimited resistance to any individual or ust 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

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SECTION 8: Exposure controls/personal protection

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Gloves

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

May be used, gloves(breakthrough time) 4 - 8 hours: polyvinyl alcohol (PVA) (> 0.3 mm) Recommended, gloves(breakthrough time) > 8 hours: 4H/Silver Shield® (> 0.07 mm), Viton® (> 0.7 mm), nitrile rubber (> 0.75 mm), neoprene (> 0.35 mm), butyl rubber (> 0.4 mm), fluor rubber (> 0.35 mm), PVC (> 0.5 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	1	Use chemical-resistant protective suit / disposable overall.
		Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
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	: White., Grey
Odour	: Characteristic.
Odour threshold	: Not applicable.
Melting point/freezing point	: Not applicable.
Initial boiling point and boiling range	: Lowest known value: 79.59°C (175.3°F) (butanone). Weighted average: 170.39°C (338.7°F)
Flammability	: Not applicable.
Upper/lower flammability or explosive limits	: 0.43 - 11.5%
Flash point	: Closed cup: 15.5°C (59.9°F)
Auto-ignition temperature	: Lowest known value: 400°C (752°F) (silane, trimethyoxy[3-(oxiranyl-methoxy) propyl]-).
Decomposition temperature	: Not available.
рН	: Not applicable.
Viscosity	: Not available.
Solubility(ies)	:
Media	Result
bold water hot water	Not soluble Not soluble

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	Partition coefficient: n-octanol/ water	:	Not available.
	Vapour pressure	1	Highest known value: 10.5 kPa (78.8 mm Hg) (at 20°C) (butanone). Weighted average: 2.12 kPa (15.9 mm Hg) (at 20°C)
	Evaporation rate	1	7.12 (butanone) compared with butyl acetate
	Density	1	1.581 to 1.618 g/cm ³
	Vapour density	:	Highest known value: 11.7 (Air = 1) (epoxy resin (MW \leq 700)). Weighted average: 6.5 (Air = 1)
	Explosive properties	1	Not available.
	Oxidising properties	1	Not available.
	Particle characteristics		
	Median particle size	1	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	s.
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	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 toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
butanone epoxy resin (MW ≤ 700)	LD50 Dermal LD50 Dermal LD50 Oral	Rabbit Rabbit Mouse	6480 mg/kg 20 g/kg 15600 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)
putanone	2737	6480	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
epoxy-formaldehyde resin (MW<700)	Skin - Mild irritant	Mammal - species unspecified	-	-	-
titanium dioxide	Skin - Mild irritant	Human	-	72 hours	-
butanone	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-

SECTION 11: Toxicological information

C	ECTION THE TOXICOID	gical information				
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	epoxy resin (MW ≤ 700)	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
		Skin - Mild irritant	Rabbit	-	500 milligrams	-
	Oxirane, 2-(chloromethyl)-, polymer with α-hydro-ω- hydroxypoly[oxy(methyl- 1,2-ethanediyl)]	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
		Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters	-
		Skin - Mild irritant	Mammal - species unspecified	-	-	-
	1,2-Ethanediamine, polymer with aziridine, reaction product with 2-propenoic acid, 2-ethylhexyl ester, salt with oxirane, methyl-, polymer with oxirane, monobutyl ether, phosphate	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
	silane, trimethyoxy[3- (oxiranyl-methoxy)propyl]-	Eyes - Irritant	Mammal - species unspecified	-	-	-

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
<pre>poxy-formaldehyde resin (MW<700)</pre>	skin	Mammal - species unspecified	Sensitising
epoxy resin (MW ≤ 700)	skin	Mammal - species unspecified	Sensitising
Oxirane, 2-(chloromethyl)-, polymer with α-hydro-ω- hydroxypoly[oxy(methyl- 1,2-ethanediyl)]	skin	Mammal - species unspecified	Sensitising

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

No known significant effects or critical hazards.

Reproductive toxicity

- **Developmental effects**
- No known significant effects or critical hazards.No known significant effects or critical hazards.
- Fertility effects Teratogenicity

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
butanone	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Potential acute health effects

Date of issue/Date of revision

SECTION 11: Toxicological information

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Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to th	e physical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Other information	: None identified.

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
€poxy-formaldehyde resin (MW<700)	Acute EC50 2 mg/l	Daphnia	24 hours
, ,	Acute LC50 2 mg/l	Fish	96 hours
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Water flea - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 μg/l Marine water	Fish - Mummichog - Fundulus heteroclitus	96 hours
butanone	Acute EC50 500000 µg/l Marine water	Algae - Diatom - Skeletonema costatum	96 hours
	Acute LC50 530 mg/l Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours
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

Conclusion/Summary : This material is toxic 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-formaldehyde resin Not readily -(MW<700) epoxy resin (MW \leq 700) -Not readily silane, trimethyoxy[3-_ Not readily (oxiranyl-methoxy)propyl]-

12.3 Bioaccumulative potential

SECTION 12: Ecological information

BECHON 12. Ecological information			
Product/ingredient name	LogPow	BCF	Potential
<pre>poxy-formaldehyde resin (MW<700)</pre>	2.7	-	low
butanone epoxy resin (MW ≤ 700)	0.3 2.64 to 3.78	- 31	low low

12.4 Mobility in soil	
Soil/water partition	: Not available.
coefficient (Koc)	
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 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	
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.
<u>Waste catalogue</u>	

	Waste code	Waste designation
	08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances
_		

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	Waste catalogue		
CEPE Guidelines	15 01 10*	packaging containing residues of or contaminated by hazardous substances	
Special precautions	taken when Empty conta residues ma container. E thoroughly ir	I and its container must be disposed of in a safe way. Care should be handling emptied containers that have not been cleaned or rinsed out. iners or liners may retain some product residues. Vapour from product y create a highly flammable or explosive atmosphere inside the Do not cut, weld or grind used containers unless they have been cleaned internally. Avoid dispersal of spilt material and runoff and contact with ays, drains and sewers.	

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	Paint	Paint	Paint. Marine pollutant (epoxy-formaldehyde resin (MW<700), epoxy resin (MW ≤ 700))	Paint
14.3 Transport hazard class(es)	3	3		3
14.4 Packing group	11	11	II	11
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

ADR/RID	:	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Hazard identification number</u> 33 <u>Special provisions</u> 640 (C) <u>Tunnel code</u> (D/E)
ADN	:	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Sizes of ≤5 L or ≤5 kg. Special provisions 640 (C)
IMDG	:	The marine pollutant mark is not required when transported in sizes of \leq 5 L or \leq 5 kg. Emergency schedules F-E, <u>S-E</u>
ΙΑΤΑ	:	The environmentally hazardous substance mark may appear if required by other transportation regulations.
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 Transport in bulk	:	Not available.

instruments

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>UK (GB)/REACH</u>

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Date of issue/Date of revision

SECTION 15: Regulatory information

Not listed.

Persistent Organic Pollu	itante
Not listed.	
Annex XVII - Restriction on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	s : Not applicable.
Seveso Directive	
This product is controlled u Danger criteria	nder the Seveso Directive.
Category P5c	
E2	
EU regulations	
Industrial emissions (integrated pollution prevention and control) Air	- Not listed
Industrial emissions (integrated pollution prevention and control) Water	- Not listed
International regulations	
Chemical Weapon Conve Not listed.	ntion List Schedules I, II & III Chemicals
Montreal Protocol Not listed.	
Stockholm Convention of Not listed.	n Persistent Organic Pollutants
	n Prior Informed Consent (PIC)
Not listed.	
UNECE Aarhus Protocol (Not listed.	on POPs and Heavy Metals
15.2 Chemical safety assessment	: This product contains substances for which Chemical Safety Assessments are still required.
SECTION 16: Other	[,] information
Indicates information that	t has changed from previously issued version.
Abbreviations and	: ATE = Acute Toxicity Estimate

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and
	Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019
	No. 720 and amendments
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = GB 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

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SECTION 16: Other information

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Flam. Lig. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
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

Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Carc. 2	CARCINOGENICITY - Category 2
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
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
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revision	
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Version

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: 1.03