Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

SAFETY DATA SHEET



Jotamastic Smart Pack HB Comp A

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

1.1 Product identifier	
Product name	: Jotamastic Smart Pack HB Comp A
Product code	: 34802
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	Jotun Paints (Europe) Ltd. Stather Road
3202 Sandefjord	Flixborough, Scunthorpe
Norway	North Lincolnshire
Tel: + 47 33 45 70 00	DN15 8RR
Fax: +47 33 45 72 42	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	ber
National advisory body/Poi	on Centre
Telephone number	: Contact NHS Direct; phone 0845 4647 or 111. Open 24/7.

<u>Supplier</u>

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. 3, H226 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	: Warning.
Hazard statements	 H226 - 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 contains substances that are assessed to be a PBT or a vPvB, refer to Section 3.2.
Other hazards which do not result in classification	: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture				
Product/ingredient name	Identifiers	%	Classification	Туре
epoxy resin (MW ≤ 700)	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2	≥25 - ≤50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	[1]
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers	EC: 500-180-5 CAS: 67989-52-0	≥10 - ≤25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, 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] [*]
glycidyl ether of 3-alkyl phenol	REACH #: 01-2119982994-15 EC: 500-210-7 CAS: 68413-24-1	≤10	Skin Sens. 1, H317	[1]
Phenol, methylstyrenated	REACH #: 01-2119555274-38 EC: 700-960-7 CAS: 68512-30-1	≤5	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1] [3]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≤5	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
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]
hydrocarbons, C9, aromatics	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6	≤3	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066 See Section 16 for	[1]
			the full text of the H statements declared above.	

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

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for vPvB

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

.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.			
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.			
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	: Treat symptomatically. Contact poison treatment specialist immediately if large
	quantities have been ingested or inhaled.
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.	

SECTION 5: Firefighting measures

5.2 Special hazards arising f	5.2 Special hazards arising from the substance or mixture			
Hazards from the substance or mixture	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.			
Hazardous combustion products	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides			
5.3 Advice for firefighters				
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident 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.			
Special protective equipment for fire-fighters	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, protective 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 containment 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 spill 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
xylene	EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-, p- or mixed isomers] Absorbed through skin. STEL: 441 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.

Biological exposure indices

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure indices			
	EH40/2005 BMGVs (United Kingdom (UK), 8/2018) [Xylene, o-, m-, p- or mixed isomers] BGV: 650 mmol/mol creatinine, methyl hippuric acid [in urine]. Sampling time: post shift.			
Recommended monitoring : Reference should be made to appropriate monitoring standards. Reference to				

Recommended monitoring	- 2	Reference should 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 resin (MW ≤ 700)	DNEL	Long term Dermal	89.3 µg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.5 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	0.75 mg/	Workers	Systemic
			kg bw/day	. .	
	DNEL	Long term	0.87 mg/m ³	General	Systemic
	DNEL	Inhalation Long term	4.93 mg/m ³	population Workers	Systemic
	DINCL	Inhalation	4.95 mg/m	WOIKEI3	Oystenne
4,4'-Isopropylidenediphenol,	DNEL	Short term Dermal	4.76 µg/	General	Local
oligomeric reaction products with			cm²	population	
1-chloro-2,3-epoxypropane, reaction					
products with fatty acids,					
C18-unsatd., dimers	DNEL	Long term Dermal	4.76 µg/	General	Local
	DINCE	Long term Derma	cm ²	population	Local
	DNEL	Short term Dermal	7.9 µg/cm ²	Workers	Local
		Long term Dermal	7.9 µg/cm ²	Workers	Local
	DNEL	Short term Dermal	3.3 mg/kg	General	Systemic
			bw/day	population	Quanta main
	DNEL	Long term Dermal	3.3 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	5.6 mg/kg	Workers	Systemic
	DILLE	chort torm Dorman	bw/day	V on one	Cyclonic
	DNEL	Long term Dermal	5.6 mg/kg bw/day	Workers	Systemic
	DNEL	Long term	23.5 mg/m ³	General	Local
		Inhalation	Ū	population	
	DNEL	Long term	23.5 mg/m ³	General	Systemic
		Inhalation	20.0	population	1 1
	DNEL	Short term Inhalation	39.2 mg/m ³	Workers	Local
	DNEL	Long term	39.2 mg/m ³	Workers	Local
	DILLE	Inhalation	00.2 mg/m	V on one	Loodi
	DNEL	Short term	39.2 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Long term	39.2 mg/m ³	Workers	Systemic
titanium dioxide	DNEL	Inhalation Long term	28 µg/m³	General	Local
	DINEL	Inhalation	20 µg/m	population	LUCAI
	DNEL	Long term	170 µg/m³	Workers	Local
		Inhalation			
glycidyl ether of 3-alkyl phenol	DNEL	Long term Oral	0.31 mg/	General	Systemic
		Long torm Dames	kg bw/day	population	Sustamia
	DNEL	Long term Dermal	0.31 mg/ kg bw/day	General population	Systemic
	DNEL	Long term	0.54 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Long term Dermal	0.875 mg/	Workers	Systemic
			kg bw/day		
		1			1

	DNEL	Long term	3.09 mg/m ³	Workers	Systemic
Dhanal mathylatyranatad	DNEL	Inhalation	16.4 mg/	Workers	
Phenol, methylstyrenated	DINEL	Long term Dermal	kg bw/day	WORKERS	Systemic
	DNEL	Long term	57 mg/m ³	General	Systemic
	DINEL	Inhalation	57 mg/m	population	Systemic
		malation		[Consumers]	
	DNEL	Long term Dermal	8 mg/kg	General	Systemic
		5	bw/day	population	,
			,	[Consumers]	
	DNEL	Long term	28 mg/m ³	General	Systemic
		Inhalation		population	
				[Consumers]	
	DNEL	Long term Oral	4 mg/kg	General	Systemic
			bw/day	population	
			0.0	[Consumers]	O un tra maile
	DNEL	Long term Oral	0.2 mg/kg	General	Systemic
	DNEL	Long term	bw/day 0.348 mg/	population General	Systemic
	DINEL	Inhalation	0.340 mg/ m ³	population	Systemic
	DNEL	Long term	1.41 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Long term Dermal	1.67 mg/	General	Systemic
		Ū	kg bw/day	population	
	DNEL	Long term Dermal	3.5 mg/kg	Workers	Systemic
			bw/day	_	
ylene	DNEL	Long term Oral	5 mg/kg	General	Systemic
		1	bw/day	population	1 1
	DNEL	Long term	65.3 mg/m ³	General	Local
	DNEL	Inhalation Long term	65.3 mg/m³	population General	Systemic
	DINEL	Inhalation	05.5 mg/m	population	Systemic
	DNEL	Long term Dermal	125 mg/kg	General	Systemic
		5	bw/day	population	,
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term	221 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Long term	221 mg/m ³	Workers	Systemic
		Inhalation	°,		-
	DNEL	Short term	260 mg/m ³	General	Local
		Inhalation		population	
	DNEL	Short term	260 mg/m ³	General	Systemic
	DNEL	Inhalation Short term	112 malm3	population Workers	Local
	DINEL	Inhalation	442 mg/m ³	VVUINEIS	LUCAI
	DNEL	Short term	442 mg/m ³	Workers	Systemic
		Inhalation	· · _ ···g/····		0,0001110
ilane, trimethyoxy[3-(oxiranyl-	DNEL	Long term Oral	5 mg/kg	General	Systemic
nethoxy)propyl]-			bw/day	population	-
	DNEL	Long term Dermal	5 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	10 mg/kg	Workers	Systemic
		Long torm	bw/day	Conoral	Curtonal-
	DNEL	Long term Inhalation	17 mg/m³	General	Systemic
	DNEL	Long term	70.5 mg/m³	population Workers	Systemic
	DINEL	Inhalation	70.5 mg/m	** UIVCI 3	Cysternic
	DNEL	Short term	26400 mg/	General	Systemic
		Inhalation	m ³	population	
ydrocarbons, C9, aromatics	DNEL	Long term Dermal	 12.5 mg/	Workers	Systemic
			kg bw/day		
	DNEL	Long term	151 mg/m ³	Workers	Systemic
	1	Inhalation			

3 3	7.5 mg/kg	DNEL Long term Dermal 7.5 mg/kg General Systemic						
	bw/day	DINEL						
	burday							
mg/m ³ General Systemic	32 mg/m³	DNEL						
population [Consumers]								
	7.5 mg/kg	DNEL						
//day population [Consumers]	bw/day							
-	0.41 mg/m ³	DNEL						
population								
9 mg/m ³ Workers Systemic	1.9 mg/m³	DNEL						
	178.57 mg/ m³	DNEL						
	640 mg/m ³	DNEL						
population	Ũ							
•	837.5 mg/ m³	DNEL						
	1066.67 mg/m³	DNEL						
52 mg/ General Systemic	1152 mg/ m ³	DNEL						
population	1286.4 mg/	DNEL						

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
epoxy resin (MW ≤ 700)	Fresh water	0.006 mg/l	-
	Marine	0.0006 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	0.996 mg/l	-
	Marine water sediment	0.0996 mg/l	-
	Soil	0.196 mg/l	-
Phenol, methylstyrenated	Fresh water	14 µg/l	-
	Marine	1.4 µg/l	-
	Sewage Treatment Plant	2.4 mg/l	-
	Fresh water sediment	52.9 mg/kg dwt	-
	Marine water sediment	5.3 mg/kg dwt	-
	Soil	10.5 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	-

8.2 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 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.

May be used, gloves(breakthrough time) 4 - 8 hours: polyvinyl alcohol (PVA) (> 0.3 mm), neoprene (> 0.35 mm), butyl rubber (> 0.4 mm), PVC (> 0.5 mm)

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

Ap	pea	ran	се

Appearance				
Physical state	:	Liquid.		
Colour	:	Grey, Red, Yellowish-brown., Black, Green.		
Odour	:	Characteristic. [Strong]		
Odour threshold	:	Not applicable.		
Melting point/freezing point	:	Not applicable.		
Initial boiling point and boiling range	:	Lowest known value: 136.16°C (277.1°F) (xylene). Weighted average: 270.88°C (519.6°F)		
Flammability	:	Not applicable.		
Upper/lower flammability or explosive limits	:	Greatest known range: Lower: 1.4% Upper: 7.6% (hydrocarbons, C9, aromatics)		
Flash point	1	Closed cup: 44°C (111.2°F)		
Auto-ignition temperature	:	Lowest known value: 280 to 470°C (536 to 878°F) (hydrocarbons, C9, aromatics).		
Decomposition temperature	:	Not available.		
рН	:	Not applicable.		
Viscosity	:	Kinematic (40°C): >20.5 mm²/s		
Solubility(ies)	:			
Media		Result		
cold water hot water		Not soluble Not soluble		
Partition coefficient: n-octanol/ water	:	Not available.		
Vapour pressure	:	Highest known value: 0.9 kPa (6.7 mm Hg) (at 20°C) (xylene). Weighted average: 0.08 kPa (0.6 mm Hg) (at 20°C)		
Evaporation rate	:	0.77 (xylene) compared with butyl acetate		
Density	:	1.293 to 1.39 g/cm ³		
Vapour density	:	Highest known value: 11.7 (Air = 1) (epoxy resin (MW ≤ 700)). Weighted average: 10.88 (Air = 1)		

- **Explosive properties** : Not available.
- **Oxidising properties** : Not available.

: Not applicable.

9.2 Other information

Particle characteristics Median particle size

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	: 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.			
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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
epoxy resin (MW ≤ 700)	LD50 Dermal LD50 Oral	Rabbit Mouse	20 g/kg 15600 mg/kg	-
xylene	LC50 Inhalation Vapour LD50 Oral TDLo Dermal	Rat Rat Rabbit	11 mg/l 4300 mg/kg 4300 mg/kg	4 hours - -

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)
Jotamastic Smart Pack HB Comp A	N/A	32924.6	N/A	329.2	N/A
xylene	4300	1100	N/A	11	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
epoxy resin (MW ≤ 700)	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
titanium dioxide	Skin - Mild irritant	Human	-	72 hours	-
Phenol, methylstyrenated	Skin - Mild irritant	Mammal - species unspecified	-	-	-
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
silane, trimethyoxy[3- (oxiranyl-methoxy)propyl]-	Eyes - Irritant	Mammal - species unspecified	-	-	-

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
epoxy resin (MW ≤ 700)	skin	Mammal - species unspecified	Sensitising
glycidyl ether of 3-alkyl phenol	skin	Mammal - species unspecified	Sensitising
Phenol, methylstyrenated	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.
- Fertility effects
- : No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards. Specific target organ toxicity (single exposure)

SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
hydrocarbons, C9, aromatics	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Product/	ng	redient name	Result	
xylene hydrocarbons, C9, aromatics			ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1	
Potential acute health effects	2			
Eye contact	:	Causes serious eye irritation.		
Inhalation	:	No known significant effects or cri	tical hazards.	
Skin contact	:	Causes skin irritation. May cause	an allergic skin reaction.	
Ingestion	:	: No known significant effects or critical hazards.		
Symptoms related to the phy	sic	al, chemical and toxicological ch	naracteristics	
Eye contact	:	Adverse symptoms may include the pain or irritation watering redness	ne following:	
Inhalation	:	No specific data.		
Skin contact	:	Adverse symptoms may include th irritation redness	ne following:	
Ingestion	:	No specific data.		
General	:	Once sensitized, a severe allergic to very low levels.	reaction may occur when subsequently exposed	
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
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
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Water flea -	48 hours
		Ceriodaphnia dubia - Neonate	
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Water flea - Daphnia	48 hours
		pulex - Neonate	
	Acute LC50 >1000000 µg/l Marine	Fish - Mummichog - Fundulus	96 hours
	water	heteroclitus	
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Daggerblade	48 hours
-		grass shrimp - Palaemonetes	
		pugio	
	Acute LC50 13400 µg/l Fresh water	Fish - Fathead minnow -	96 hours
		Pimephales promelas	
hydrocarbons, C9, aromatics	Acute EC50 <10 mg/l	Daphnia	48 hours
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SECTION 12: Ecological information

	Acute IC50 <10 mg/l	Algae	72 hours
	Acute LC50 <10 mg/l	Fish	96 hours
Conclusion/Summary	: Water polluting material. May b	e harmful to the environme	nt if released in large

: Water polluting material. May be harmful to the environment if released in large quantities. This material is toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Conclusion/Summary	: Not available.
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Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
epoxy resin (MW ≤ 700)	-	-	Not readily
xylene silane, trimethyoxy[3-	-	-	Readily Not readily
(oxiranyl-methoxy)propyl]-			
hydrocarbons, C9, aromatics	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
epoxy resin (MW ≤ 700)	2.64 to 3.78	31	low
Phenol, methylstyrenated	3.627	-	low
xylene	3.12	8.1 to 25.9	low
hydrocarbons, C9, aromatics	-	10 to 2500	high

12.4 Mobility in soil

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

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	Р	В	Т	vPvB	vP	vB
epoxy resin (MW ≤ 700)	No	N/A	No	No	No	N/A	No
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-	No	N/A	N/A	No	N/A	N/A	N/A
2,3-epoxypropane, reaction products with fatty acids,							
C18-unsatd., dimers							
glycidyl ether of 3-alkyl phenol	No	N/A	N/A	No	N/A	N/A	N/A
Phenol, methylstyrenated	No	N/A	N/A	No	SVHC (Recommended)	Specified	Specified
xylene	No	N/A	No	No	No	N/A	No
silane, trimethyoxy[3- (oxiranyl-methoxy)propyl]-	No	N/A	N/A	No	N/A	N/A	N/A
hydrocarbons, C9, aromatics	No	N/A	No	No	No	N/A	No

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

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SECTION 13: Disp	osal considerations	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.	
Hazardous waste	: Yes.	
Waste catalogue		
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	: 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	ΙΑΤΑ
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	Paint	Paint	Paint. Marine pollutant (epoxy resin (MW ≤ 700))	Paint
14.3 Transport hazard class(es)	3	3		3
14.4 Packing group	111	111	111	111
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> 30 <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.
IMDG	: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency schedules</u> F-E, <u>S-E</u>

SECTION 14: Transport information				
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 according to IMO instruments	: Not available.			

SECTION 15: Regulatory information

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

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

<u>Annex XIV</u>

None of the components are listed.

Substances of very high concern

Intrinsic property	Ingredient name	 Reference number	Date of revision
vPvB	oligomerisation and alkylation reaction products of 2-phenylpropene and phenol	D(2023) 8585-DC	23.01.2024

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category	
P5c E2	
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 Conventi	ion List Schedules I, II & III Chemicals

SECTION 15: Regulatory information

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety	
assessment	

: This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	 ATE = Acute Toxicity Estimate 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
	SGG = Segregation Group vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

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
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

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.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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

SECTION 16: Other information

Acute Tox. 4 Aquatic Chronic 2 Aquatic Chronic 3 Asp. Tox. 1 Carc. 2 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 3 Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1B	ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1B
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
Date of printing	: 29.05.2024
Date of issue/ Date of revision	: 29.05.2024
Date of previous issue	e : 29.05.2024
Version	: 1.07

Notice to reader

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