SAFETY DATA SHEET



Jotamastic Smart Pack HB Alu Comp A

Section 1. Identification : Jotamastic Smart Pack HB Alu Comp A **GHS** product identifier **Product code** : 36922 : Not available. Other means of identification Product type : Liquid. **Product description** : Paint. Relevant identified uses of the substance or mixture and uses advised against Use in coatings - Industrial use Use in coatings - Professional use **Supplier's details** : 佐敦涂料(张家港)有限公司 江苏省张家港保税区扬子江化学工业园长江路15号 215634 电话: +86 512 58937988 传真:+86 512 58937986 Jotun Coatings (Zhangjiagang) Co. Ltd No.15 Changjiang Road Jiangsu Yangtze River International Chemical Industry Park, Zhangjiagang Free Trade Zone, Jiangsu Province 215634 Tel: +86 512 58937988 Fax: +86 512 58937986 Jotun Paints (Malaysia) Sdn Bhd, Lot 7 Persiaran Perusahaan, Section 23 40300 SHAH ALAM, Selangor Darul Ehsan Malaysia Tel: +603 51235500 Fax: +603 51235599 SDSJotun@jotun.com : Jotun Coatings (Taiwan) Ltd. Co. Tel: +886 2 87705061 **Emergency telephone** number (with hours of operation)

Section 2. Hazards identification

Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1 AQUATIC TOXICITY (CHEONIC) - Category 2
	AQUATIC TOXICITY (CHRONIC) - Category 2

GHS 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	
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	: P403 + P235 - Store in a well-ventilated place. Keep cool.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not : None known.

result in classification

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

Product name	% (w/w)	CAS number	Туре
epoxy resin (MW ≤ 700)	≥25 - ≤50	1675-54-3	[1]
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers	≥10 - ≤25	67989-52-0	[1]
glycidyl ether of 3-alkyl phenol	≤10	68413-24-1	[1]
Phenol, methylstyrenated	≤5	68512-30-1	[1]
xylene	≤5	1330-20-7	[1] [2]
hydrocarbons, C9, aromatics	≤3	64742-95-6	[1]
silane, trimethyoxy[3-(oxiranyl-methoxy)propyl]-	<3	2530-83-8	[1]

Section 3. Composition/information on ingredients

		J	
产品名称	% (w/w)	CAS号码	类型
环氧树脂(MW < 700)	≥25 - ≤50	1675-54-3	[1]
C18-不饱和脂肪酸二聚体与4,4'-(1-甲基亚乙 基)联(二)苯酚和氯甲基环氧乙烷的聚合物	≥10 - ≤25	67989-52-0	[1]
坚果壳液与环氧氯丙烷的聚合物	≤10	68413-24-1	[1]
甲基苯乙烯化苯酚	≤5	68512-30-1	[1]
二甲苯	≤5	1330-20-7	[1] [2]
轻芳烃溶剂石脑油(石油)	≤3	64742-95-6	[1]
γ-丙三醇氧基丙基三甲基硅烷	<3	2530-83-8	[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 and hence require reporting in this section.

Type

[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

Description of necessary 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.

	/effects, acute and delayed			
Potential acute health effe	<u>ects</u>			
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.			
Over-exposure signs/sym	nptoms			
Date of issue/Date of revision	: 29.05.2024 Date of previous issue : 28.05.2024	Version	:1.06	3/13

Section 4. First aid measures

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.
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
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.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: 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 thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters	: 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.
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

Personal precautions, protective equipment and emergency procedures	: 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.
	inadequate. Put on appropriate personal protective equipment.

Section 6. Accidental release measures

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.
Methods and material for con	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 spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

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.
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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Section 8. Exposure controls/personal protection

xylene TW Minstry of Labor, labor permissible workplace exposure standards, allovable concentration (Taiwan, 32019), [bylenes] STEL: 542.5 mgm 15 minutes. STEL: 542.5 mgm 15 minutes. STEL: 542.5 mgm 15 minutes. STEL: 542.5 mgm 15 minutes. Biological exposure indices TWA: 100 ppm 8 hours. No exposure indices known. Appropriate ongineering controls to keep worker exposure to alborne 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 vertilation equipment. ndt/idual protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection Hand protection : There is no one glove material or combination of themicals. The breaktings in timus to greater the followed. The performance or effectiveness of the glove may be reduced by physical/chemica damage endporem internace. Hand protection : There is no one glove material or combination of demicals. The breaktings in the must be greated at the followed. The performance or effectiveness of the glove may be reduced by physical/chemica damage endpore maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. Was a suitable gloves tested to ISO 3741-12016. May be used, gloves tyneathrough time) 4 - 8 hours: Polyinyl alcohol (PVA) (> 0.3 mm), neoprene (> 0.35 mm), nitrile rubber (> 0.4 mm), PVC (> 0.5 mm). Recommende () gloves topreathrough time) 4 - 8 hours: Po	Ingredient name			Exposure limits	
No exposure indices known. 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. Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Hand protection : There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination 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/chemica 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. Ways be used, gloves(breakthrough time) > 8 hours: helyking' Slowes. The user must check that the final choice of type of glove selected for handling this product is possible. The following protection should be worn, unless the assessment. Eye protection : Safety eyewear complying to ISO 16321-12022 should be used when a risk assessment indicates this is necc	xylene			workplace exposure standards, allo concentration (Taiwan, 3/2018). [xyle STEL: 542.5 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 434 mg/m ³ 8 hours.	wable
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. ndividual protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. 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/chemica 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. Wear suitable gloves tested to ISO 374-1:2016. May be used, gloves(breakthrough time) 4 = 8 hours: aH/Sliver Shield@ (> 0.07 mm), Tefion (> 0.35 mm), hutri rubber (> 0.75 mm) For right choice of glove materials, with focus on 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 p	Biological exposure indice	s			
controls 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. ndividual protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. 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/chemica 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. 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), nutrile rubber (> 0.75 mm) Recommended, gloves (breakthrough time) 4 - 8 hours: HVSilver Shield& (> 0.07 mm), Teflon (> 0.35 mm), nutrile rubber (> 0.75 mm)	No exposure indices known				
Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Hand protection : There is no one glove material 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/chemica damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure thas occurred. Wear suitable gloves (breakthrough time) > 8 hours: 4H/Sliver Shield® (> 0.07 mm), Teflon (> 0.35 mm), butly rubber (> 0.4 mm), PVC (> 0.5 mm) Recommended, gloves(breakthrough time) > 8 hours: 4H/Sliver Shield® (> 0.07 mm), Teflon (> 0.35 mm), butly rubber (> 0.4 mm), PVC (> 0.5 mm) Fey protection : Safety eyewear complying to ISO 16321-12022 should be used when a risk assessment. Eye protection : Safety eyewear complying to ISO 16321-12022 should be used when a risk assessment. Body protection : Safety eyewear complying to ISO 16321-12022 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		:	ventilation or other engineering contra contaminants below any recommend also need to keep gas, vapour or dus	ols to keep worker exposure to airborne ed or statutory limits. The engineering c t concentrations below any lower explos	
Hand protectionappropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.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/chemica 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. 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), butly rubber (> 0.4 mm), PVC (> 0.5 mm) Recommended, gloves(breakthrough time) 4 - 8 hours: H//Silver Shield® (> 0.07 mm), Teflon (> 0.35 mm), nitrile rubber (> 0.75 mm)Eye 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 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 this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible,	ndividual protection measu	ires			
 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/chemica 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. 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. Eye 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. I for ontact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection should be worn, unless the assessment protective suit / disposable overall. Personal protective equipment for the body should be approved by a specialist before handling this product. When there is a risk of ignition from static discharges, clothing should include anti-static overalls, boots and glo	Respiratory protection	:	appropriate standard or certification. respiratory protection program to ens	Respirators must be used according to	а
Body protection: Use chemical-resistant protective suit / disposable overall.Body protection: 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 approved by a specialist before handling this product.	Hand protection	:	resistance to any individual or combin The breakthrough time must be great The instructions and information provision storage, maintenance and replacement Gloves should be replaced regularly a material. Always ensure that gloves are free free correctly. The performance or effectiveness of damage and poor maintenance. Barrier creams may help to protect the applied once exposure has occurred. Wear suitable gloves tested to ISO 3 May be used, gloves(breakthrough times), neoprene (> 0.35 mm), butyl ru Recommended, gloves(breakthrough mm), Teflon (> 0.35 mm), nitrile rubb For right choice of glove materials, we penetration, seek advice by the supp The user must check that the final che product is the most appropriate and the	nation of chemicals. ter than the end use time of the product. vided by the glove manufacturer on use, ent must be followed. and if there is any sign of damage to the om defects and that they are stored and the glove may be reduced by physical/ch the exposed areas of the skin but should the 74-1:2016. me) 4 - 8 hours: polyvinyl alcohol (PVA) of bber (> 0.4 mm), PVC (> 0.5 mm) in time) > 8 hours: 4H/Silver Shield® (> 0. er (> 0.75 mm) ith focus on chemical resistance and tim olier of chemical resistant gloves. noice of type of glove selected for handlin akes into account the particular condition	glove used nemical not be (> 0.3 07 e of ng this
Other skin protectionPersonal 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.	Eye protection	:	Safety eyewear complying to ISO 163 assessment indicates this is necessa gases or dusts. If contact is possible unless the assessment indicates a hi	321-1:2022 should be used when a risk ary to avoid exposure to liquid splashes, i , the following protection should be worn	,
Other skin protectionis 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.	Body protection	:			
selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.			being performed and the risks involve before handling this product. When the wear anti-static protective clothing. F discharges, clothing should include a	ed and should be approved by a specialis here is a risk of ignition from static electron for the greatest protection from static nti-static overalls, boots and gloves.	st
Date of issue/Date of revision: 29.05.2024Date of previous issue: 28.05.2024Version: 1.066/1	Other skin protection	:	selected based on the task being per	formed and the risks involved and shoul	d be
	Date of issue/Date of revision		: 29.05.2024 Date of previous issue	: 28.05.2024 Version : 1.06	6/13

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.

Section 9. Physical and chemical properties and safety characteristics

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

Physical state : Liquid.	
Colour : Aluminium, ,Aluminium red toned	
Odour : Characteristic. [Strong]	
Odour threshold : Not available.	
pH : Not applicable.	
Melting point/freezing point : Not applicable.	
Boiling point, initial boiling : Not available. point, and boiling range	
Flash point : Closed cup: 44°C (111.2°F)	
Flammability : Not available.	
Lower and upper explosion : Greatest known range: Lower: 1.4% Upper: 7.6% (hydrocarbons, C9, aromatics limit/flammability limit)
Vapour pressure :	

	Vap	oour Pressu	re at 20°C	V	apour pres	ssure at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	20.25	2.7				
ethylbenzene	9.30076	1.2				
butan-1-ol	<7.50064	<1	DIN EN 13016-2			
xylene	6.7	0.89				
hydrocarbons, C9, aromatics	2.5	0.33				
dimethyl sulfoxide	0.42	0.056	EU A.4			
Distillates (petroleum), hydrotreated light	0.22502 to 0.45004	0.03 to 0.06				
2,6-ditert-butyl-p-cresol	0.00825	0.0011				
silane, trimethyoxy[3-(oxiranyl- methoxy)propyl]-	0.0082	0.0011				
Phenol, methylstyrenated	0.0075	0.001	OECD 104			
glycidyl ether of 3-alkyl phenol	0.000000012	0.0000000016				
epoxy resin (MW ≤ 700)	0	0				
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers	0 to 0.000000002	0 to 0.0000000027				
talc (non-asbestos form)	0	0				
aluminium powder (stabilised)	0	0				

Section 9. Physical and chemical properties and safety characteristics

	hydroxyoctadecanoic acid, ction products with	0	0			
, -	-benzenedimethanamine and amethylenediamine					

Re	elative vapour density	: Not available.				
De	ensity	: 1.3	326 to 1.342 g/cm ³			
Sc	olubility(ies)	:				
	Media		Result			
	cold water hot water		Not soluble Not soluble			

Partition coefficient: n- : Not applicable.

octanol/water

Auto-ignition temperature :

Ingredient name	°C	°F	Method	
Distillates (petroleum), hydrotreated light	>220	>428		
hydrocarbons, C9, aromatics	280 to 470	536 to 878		
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	280 to 470	536 to 878		
dimethyl sulfoxide	300 to 302	572 to 575.6		
butan-1-ol	355	671	EU A.15	
glycidyl ether of 3-alkyl phenol	375	707	EU A.15	
silane, trimethyoxy[3-(oxiranyl-methoxy)propyl]-	400	752	DIN 51794	
Phenol, methylstyrenated	>385	>725	DIN 51794	
xylene	432	809.6		
ethylbenzene	432.22	810		
aluminium powder (stabilised)	590	1094		

Decomposition temperature: Not available.Viscosity: Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt)

Viscosity <u>Particle characteristics</u> Median particle size

: Not applicable.

Section 10. Stability and reactivity

Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidising materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

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

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	-
Phenol, methylstyrenated	Skin - Mild irritant	Mammal - species unspecified	-	-	-
xylene	Eyes - Mild irritant Skin - Mild irritant	Rabbit Rat	-	87 milligrams 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

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

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

Section 11. Toxicological information

Product/ingredient name			Result		
xylene hydrocarbons, C9, aromatics	;		ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1		
nformation on likely routes of exposure	:	Not available.			
Potential acute health effects	5				
Eye contact	:	Causes serious eye irritation.			
Inhalation	:	No known significant effects or critical	hazards.		
Skin contact	:	Causes skin irritation. May cause an a	allergic skin reaction.		
Ingestion	:	No known significant effects or critical	hazards.		
Symptoms related to the phy	<u>/sic</u>	cal, chemical and toxicological chara	<u>cteristics</u>		
Eye contact	:	Adverse symptoms may include the fo pain or irritation watering redness	llowing:		
Inhalation	:	No specific data.			
Skin contact	:	Adverse symptoms may include the fo irritation redness	llowing:		
Ingestion	:	No specific data.			
Delayed and immediate effect	<u>:ts</u>	as well as chronic effects from short	and long-term exposure		
Short term exposure					
Potential immediate effects	:	Not available.			
Potential delayed effects	:	Not available.			
Long term exposure					
Potential immediate effects	:	Not available.			
Potential delayed effects	:	Not available.			
Potential chronic health eff	ect	<u>S</u>			
Not available.					
General	:	Once sensitized, a severe allergic read to very low levels.	ction may occur when subsequently expose		
Carcinogenicity	:	No known significant effects or critical	hazards.		
Mutagenicity	:	No known significant effects or critical	hazards.		

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)		(vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Jotamastic Smart Pack HB Alu Comp A	N/A	32534.8	N/A		N/A
xylene	N/A	1100	N/A		N/A

Toxicity

Section 12. Ecological information

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

Persistence and degradability

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

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

Mobility in soil

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

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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

	UN	IMDG	ΙΑΤΑ
UN number	UN1263	UN1263	UN1263
UN proper shipping name	Paint	Paint. Marine pollutant (epoxy resin (MW ≤ 700))	Paint
Transport hazard class(es)	3	3	3
Packing group		111	III
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional informa	tion		
ADR/RID : Tunnel restriction code: (D/E) Hazard identification number: 30			
IMDG	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 k Emergency schedules F-E, S-E		
ΙΑΤΑ	 The environmentally hazardous substance mark may appear if required by other transportation regulations. 		
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.			
Transport in bulk according : Not available. to IMO instruments			

Section 15. Regulatory information

TCCSCA List of toxic chemicals

Not applicable.

TCCSCA List of concerned chemicals

Not applicable.

OSHA Enforcement Rules : This product contains substances "Specially hazardous to health": xylene, butan-1-ol. **Article 28**

Priority management chemicals, Article 2

CMR chemical substances, category 1 (Article 2.2 (I))

: Applicable

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.

Section 16. Other information

Procedure used to derive the classification

	Classification	Justification	
FLAMMABLE LIQUIDS - Cate SKIN CORROSION/IRRITATI SERIOUS EYE DAMAGE/EYE SKIN SENSITISATION - Cate AQUATIC TOXICITY (CHRON	N - Category 2 IRRITATION - Category 2A ory 1	On basis of test data Calculation method Calculation method Calculation method Calculation method	
References	: Not available.	·	
Organisation that prepared the SDS	: Jotun AS, Norway +47 33 45 70 00		
<u>History</u>			
Date of printing	: 29.05.2024		
Date of previous issue	: 28.05.2024		
Version	: 1.06		
Key to abbreviations	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations		

Indicates information that has changed from previously issued version.

Notice to reader

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Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.