SAFETY DATA SHE



SeaLion Tiecoat Plus Comp A

Section 1. Identification

GHS product identifier	1	SeaLio
Other means of identification	:	Not av
Product code	:	34882
Product description	:	Paint.
Product type	1	Liquid

on Tiecoat Plus Comp A vailable. 2

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

	Identified uses	
Use in coatings - Industrial use Use in coatings - Professional use		
<u> </u>		

Manufacturing country : Jotun Thailand Limited 700/353 Amata Nakorn Industrial Estate (BIP 2) Moo 6, Tumbol Donhualoh, Amphur Muang Chonburi Chonburi 20000 Thailand Phone: + 66 2 022 9888

Fax: + 66 2 022 9888 , + 66 38 214 375

SDSJotun@jotun.com

Emergency telephone number	÷	Jotun Thailand Limited
		Phone: + 66 2 022 9888 ext. 2100, 2400, 2404

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
GHS label elements	
Hazard pictograms	
Signal word	: Warning.
Hazard statements	: Flammable liquid and vapour. Causes serious eye irritation. Causes skin irritation.
Precautionary statements	
Prevention	: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Wash hands thoroughly after handling.
Response	: IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Section 2. Hazards identification

ell-ventilated place. Keep cool.
contents and container in accordance with all local, regional, national onal regulations.

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

Section 3. Composition/information on ingredients

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

CAS number/other identifiers	
CAS number	: Not applicable.
EC number	: Mixture.
Product code	: 34882
Ingredient name	
xylene	

Ingredient name	%	CAS number
xylene	≥10 - <20	1330-20-7
1-methoxy-2-propanol	≥10 - <20	107-98-2
ethylbenzene	<10	100-41-4
octamethylcyclotetrasiloxane	<1	556-67-2

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.

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. 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	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.

Most important symptoms/effects, acute and delayed

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Section 4. First aid measures

Potential acute health effects		
Eye contact	:	Causes serious eye irritation.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	Causes skin irritation.
Ingestion	:	No known significant effects or critical hazards.
Over-exposure signs/symptom	<u>15</u>	
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	1	No specific data.
Skin contact	:	Adverse symptoms may include the following: irritation redness
Ingestion	:	No specific data.
Indication of immediate medical attention and special treatment needed, if necessary		
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.
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.

See toxicological information (Section 11)

Section 5. Firefighting measures				
Extinguishing media Suitable extinguishing media Unsuitable extinguishing media	 Use dry chemical, CO₂, water spray (fog) or foam. Do not use water jet. 			
Specific hazards arising from the chemical	: Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.			
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides 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, protect	ive eo	quipment 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".
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).
Methods and material for cont	<u>tainm</u>	ent 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.

Section 7. Handling and storage

Precautions for safe handling	:	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 oxidizing 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name		Exposure limits
xylene		กระทรวงแรงงาน (Thailand, 8/2017). TWA: 100 ppm 8 hours.
1-methoxy-2-propanol		ACGIH TLV (United States, 3/2018). STEL: 369 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 184 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
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Section 8. Exposure controls/personal protection

ethylbenzene		กระทรวงแรงงาน (Thailand, 8/2017). TWA: 100 ppm 8 hours.		
Recommended monitoring procedures	:	: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.		
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.		
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.		
Individual protection measures	<u>.</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. 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 EN 166 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	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.		
		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.		
		Wear suitable gloves tested to EN374. May be used, gloves(breakthrough time) 4 - 8 hours: neoprene, butyl rubber, PVC Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber, 4H, Teflon, polyvinyl alcohol (PVA)		
Body protection	:	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.		

Section 8. Exposure controls/personal protection

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	: 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.
	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.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	Liquid.	
Colour	Various colours.	
Odour	Characteristic.	
Odour threshold	Not available.	
рН	Not applicable.	
Melting point	Not applicable.	
Boiling point	Lowest known value: 120.17°C (248.3°F) (1-methoxy-2-propanol). Weighted average: 165.97°C (330.7°F)	
Flash point	Closed cup: 24°C (75.2°F)	
Burning time	Not applicable.	
Burning rate	Not applicable.	
Evaporation rate	 Highest known value: 0.84 (ethylbenzene) Weighted average: 0.8compared wi butyl acetate 	th
Flammability (solid, gas)	Not applicable.	
Lower and upper explosive (flammable) limits	. 0.8 - 13.74%	
Vapour pressure	 Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighter average: 1.03 kPa (7.73 mm Hg) (at 20°C) 	t
Vapour density	Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.46 (Air = 1)	,
Relative density	: 1.014 g/cm ³	
Solubility	Insoluble in the following materials: cold water and hot water.	
Partition coefficient: n-octanol/ water	Not available.	
Auto-ignition temperature	Lowest known value: 270°C (518°F) (1-methoxy-2-propanol).	
Decomposition temperature	Not available.	
SADT	Not available.	
Viscosity	Kinematic (40°C): >0.205 cm²/s (>20.5 mm²/s)	

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredient			
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	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.			
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Section 10. Stability and reactivity

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
xylene	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
1-methoxy-2-propanol	LD50 Dermal LD50 Oral	Rabbit Rat	13 g/kg 6600 mg/kg	-
ethylbenzene	LC50 Inhalation Gas.	Rabbit	4000 ppm	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit		24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
xylene	Category 3	Not applicable.	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	Not determined	hearing organs

Aspiration hazard

Name	Result
0,	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes of exposure	: Not available.
Potential acute health effects	
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
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Section 11. Toxicological information

Skin contact	: Causes skin irritation.
Ingestion	: No known significant effects or critical hazards.
	al, chemical and toxicological characteristics
Inhalation	: No specific data.
Ingestion	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Delayed and immediate effects	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 effect	<u>S</u>
Not available.	
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
	6927.6 mg/kg 51.96 mg/l

Section 12. Ecological information

<u>Toxicity</u>			
Product/ingredient name	Result	Species	Exposure
ethylbenzene	Acute EC50 7.2 mg/l Acute EC50 2.93 mg/l Acute LC50 4.2 mg/l	Algae Daphnia Fish	48 hours 48 hours 96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene ethylbenzene octamethylcyclotetrasiloxane		-	Readily Readily Not readily

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Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
1-methoxy-2-propanol	<1	-	low
ethylbenzene	3.6	-	low
octamethylcyclotetrasiloxane	6.488	13400	high

: No known significant effects or critical hazards.

Mobility in soil

Other adverse effects

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

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimised wherever possible. 1 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 nonrecyclable 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. T	ransport information		
	UN	IMDG	ΙΑΤΑ
UN number	1263	1263	1263
UN proper shipping name	Paint	Paint	Paint
Transport hazard class(es)	3	3	3
Packing group	111	111	111
Environmental hazards	No.	No.	No.
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 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 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.
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SeaLion Tiecoat Plus Comp A			
Section 14.	Transport information		
Additional information	-	Emergency schedules (EmS) F-E, <u>S-E</u>	-

Transport in bulk according to Annex II of Marpol and the IBC Code	:	Not available.
ADR / RID	:	Tunnel restriction code: (D/E) Hazard identification number: 30
		ADR/RID: Viscous substance. Not restricted, ref. chapter 2.2.3.1.5 (applicable to receptacles < 450 litre capacity).
IMDG	1	IMDG: Viscous substance. Transport in accordance with paragraph 2.3.2.5 (applicable to receptacles < 30 litre capacity).

Section 15. Regulatory information

	Hazardous Substance Act B.E. 2535	(1992)	
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<u>Type</u>

Ingredient name

<u>Type</u>

<u>Authority</u>

Conditions

No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other information

<u>History</u>		
Date of printing	1	02.04.2019
Date of issue/Date of revision	1	02.04.2019
Date of previous issue	1	02.04.2019
Version	1	1.03
Key to abbreviations	:	ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations LogPow = logarithm of the octanol/water partition coefficient
References	:	Not available.

✓ Indicates information that has changed from previously issued version.

Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

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.

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