

SAFETY DATA SHEET**SeaLion Tiecoat Comp B****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Product name : SeaLion Tiecoat Comp B
Index number : 612-108-00-0
EC number : 213-048-4
REACH Registration number

Registration number	Legal entity
01-2119480479-24	-

CAS number : 919-30-2
Product code : 2162
Product description : Hardener.
Product type : Liquid.
Other means of identification : 1-Propanamine, 3-(triethoxysilyl)-; aminopropyltriethoxysilane; 3-(Triethoxysilyl)propylamine
Chemical formula : C9-H23-N-O3-Si

1.2 Relevant identified uses of the substance or mixture and uses advised against**Identified uses**

Uses in Coatings - Industrial use
 Uses in Coatings - Professional use

1.3 Details of the supplier of the safety data sheet

Jotun Paints Co LLC,
 P.O.Box 672-C.P.O.,
 Postal Code - 111
 Sultanate of Oman
 Tel: 00968-626100
 Fax:00968-626105
 SDSJotun@jotun.com

1.4 Emergency telephone number

SHE Dept. Jotun AS, Norway
 +47 33 45 70 00

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Product definition : Mono-constituent substance

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Acute Tox. 4, H302
 Skin Corr. 1B, H314
 Eye Dam. 1, H318

Classification according to Directive 67/548/EEC [DSD]

Xn; R22
 C; R34

See Section 16 for the full text of the R phrases or H statements declared above.

Date of issue : 09.03.2018

1/11

SECTION 2: Hazards identification

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements**Hazard pictograms****Signal word**

: Danger.

Hazard statements: Harmful if swallowed.
Causes severe skin burns and eye damage.**Precautionary statements****General**

: Not applicable.

Prevention

: Wear protective gloves: 1 - 4 hours (breakthrough time): butyl rubber; < 1 hour (breakthrough time): polyvinyl chloride (PVC). Wear eye or face protection. Wear protective clothing.

Response

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Storage

: Store locked up.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients

: 3-aminopropyltriethoxysilane

Supplemental label elements

: Not applicable.

2.3 Other hazards**Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII**: No.
P: Not available. B: No. T: No.**Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII**: No.
vP: Not available. vB: No.**Other hazards which do not result in classification**

: None known.

SECTION 3: Composition/information on ingredients

Substance/mixture : Mono-constituent substance

Product/ingredient name	Identifiers	%	Classification		Type	Notes
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]		
3-aminopropyltriethoxysilane	REACH #: 01-2119480479-24 EC: 213-048-4 CAS: 919-30-2 Index: 612-108-00-0	100	Xn; R22 C; R34 See Section 16 for the full text of the R-phrases declared above.	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 See Section 16 for the full text of the H statements declared above.	[A]	-

Date of issue

: 09.03.2018

2/11

SECTION 3: Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

[A] Constituent

[B] Impurity

[C] Stabilising additive

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

SECTION 4: First aid measures

4.1 Description of first aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes severe burns.
- Ingestion** : Harmful if swallowed.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Recommended: alcohol-resistant foam, CO₂, powders, water spray.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
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 if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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. Do not breathe 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).

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. 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. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

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

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

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

No exposure limit value known.

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

Derived no effect levels

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Type	Exposure	Value	Population	Effects
3-aminopropyltriethoxysilane	DNEL	Short term Dermal	8.3 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	59 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	8.3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	59 mg/m ³	Workers	Systemic
	DNEL	Short term Dermal	5 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Inhalation	17.4 mg/m ³	Consumers	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	17.4 mg/m ³	Consumers	Systemic

Predicted no effect concentrations

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
3-aminopropyltriethoxysilane	PNEC	Fresh water	0.33 mg/l	-
	PNEC	Marine	0.033 mg/l	-
	PNEC	Sewage Treatment Plant	13 mg/l	-
	PNEC	Fresh water sediment	1.2 mg/kg dwt	-
	PNEC	Marine water sediment	0.12 mg/kg dwt	-
	PNEC	Soil	0.05 mg/kg dwt	-

8.2 Exposure controls**Appropriate engineering controls**

: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures**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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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. Wear suitable gloves tested to EN374. For prolonged or repeated handling, use the following type of gloves:

May be used, gloves(breakthrough time) 4 - 8 hours: butyl rubber
Not recommended, gloves(breakthrough time) < 1 hour: polyvinyl chloride (PVC)

SECTION 8: Exposure controls/personal protection

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** : 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.
- 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** : 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Colour** : Various colours.
- Odour** : Characteristic.
- Odour threshold** : Not available.
- pH** : 11.3
- Melting point/freezing point** : Not applicable.
- Initial boiling point and boiling range** : >68°C (>154.4°F)
- Flash point** : Closed cup: 103°C
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Upper/lower flammability or explosive limits** : 0.8 - 4.5%
- Vapour pressure** : <0.01 kPa (<0.08 mm Hg) (at 20°C)
- Vapour density** : Not available.
- Relative density** : 0.95 g/cm³ @ 20 °C
- Solubility(ies)** : Insoluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : The product is more soluble in octanol; log(octanol/water) = 1.7
- Auto-ignition temperature** : Not applicable.
- Decomposition temperature** : Not available.
- Viscosity** : Dynamic (23 °C): 2 mPa·s (2 cP)
Kinematic (23 °C): 0.02 cm²/s (2 mm²/s)
Kinematic (40°C): >0.205 cm²/s (>20.5 mm²/s)
- Explosive properties** : Not available.
- Oxidising properties** : Not available.

9.2 Other information

No additional information.

SECTION 9: Physical and chemical properties**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** : The product is stable.
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : No specific data.
- 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** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Corrosive to eyes and skin. Vapour may be irritating to eyes and respiratory system. Harmful if ingested. Material is corrosive to the mucous membranes.

Product/ingredient name	Result	Species	Dose	Exposure
3-aminopropyltriethoxysilane	LD50 Oral	Rat	1780 mg/kg	-

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

SECTION 12: Ecological information**12.1 Toxicity**

Conclusion/Summary : This product shows a low bioaccumulation potential.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
3-aminopropyltriethoxysilane	1.7	3.4	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : No.
P: Not available. B: No. T: No.

vPvB : No.
vP: Not available. vB: No.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 12: Ecological information**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

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

European waste catalogue (EWC)

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

SECTION 14: Transport information

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 accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.

International transport regulations

14.1 UN number : 2735

14.2 UN proper shipping name : Polyamines, liquid, corrosive, n.o.s. (3-aminopropyltriethoxysilane)

14.3 Transport hazard class(es) : 8



14.4 Packing group : II

14.5 Environmental hazards : No.

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.

Additional information

ADR / RID : Tunnel restriction code: (E)
Hazard identification number: 80

IMDG : **Emergency schedules (EmS)**
F-A, S-B

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU Regulation (EC) No. 1907/2006 (REACH)****Annex XIV - List of substances subject to authorisation****Substances of very high concern**

None of the components are listed.

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

Other EU regulations

Europe inventory : This material is listed or exempted.

Black List Chemicals : Not listed

Date of issue : 09.03.2018

SECTION 15: Regulatory information

Industrial emissions (integrated pollution prevention and control) - Air	: Not listed
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed
Chemical Weapons Convention List Schedule I Chemicals	: Not listed
Chemical Weapons Convention List Schedule II Chemicals	: Not listed
Chemical Weapons Convention List Schedule III Chemicals	: Not listed

15.2 Chemical safety assessment : Complete.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number
-----------------------------------	---

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Acute Tox. 4, H302	Expert judgment
Skin Corr. 1B, H314	Expert judgment
Eye Dam. 1, H318	Expert judgment

Full text of abbreviated H statements	: H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.
Full text of classifications [CLP/GHS]	: Acute Tox. 4, H302 ACUTE TOXICITY (oral) - Category 4 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B
Full text of abbreviated R phrases	: R22- Harmful if swallowed. R34- Causes burns.
Full text of classifications [DSD/DPD]	: C - Corrosive Xn - Harmful
Date of printing	: 09.03.2018
Date of issue/ Date of revision	: 09.03.2018
Date of previous issue	: 09.03.2018
Version	: 2.01
<u>Notice to reader</u>	

SECTION 16: Other information

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.