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 : 1-Propanamine, 3-(triethoxysilyI)-; aminopropyltriethoxysilane; 3-(TriethoxysilyI)

identificationpropylamineChemical 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 Saudia Co Ltd P.O.Box 30154 Yanbu 41912, Yanbu Al Sinaiyah Saudi Arabia

Telphone: + 966 920029988 Fax: + 966 14 3968483

http://www.jotun.com

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]

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SECTION 2: Hazards identification

Xn; R22 C: R34

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

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

Substance meets the criteria for vPvB according

to Regulation (EC) No. 1907/2006, Annex XIII

Other hazards which do not result in classification

: No.

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

: No.

vP: Not available. vB: No.

: None known.

SECTION 3: Composition/information on ingredients

Substance/mixture : Mono-constituent substance

			<u>Classification</u>			
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре	Notes
3-aminopropyltriethoxysilane	REACH #: 01-2119480479-24 EC: 213-048-4 CAS: 919-30-2 Index: 612-108-00-0	100	Xn; R22 C; R34	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318	[A]	-

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SeaLion Tiecoat Comp B					
SECTION 3: Composition/information on ingredients					
	See Section 16 for the full text of the R- phrases declared above.				

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.

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.

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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.

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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.

procedures

Recommended monitoring: 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

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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/m³	Workers	Systemic
	DNEL	Long term Dermal	8.3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	59 mg/m³	Workers	Systemic
	DNEL	Short term Dermal	5 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Inhalation	17.4 mg/m³	Consumers	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	,	Consumers	Systemic

Predicted no effect concentrations

Product/ingredient name	Туре	Compartment Detail	Value	Method Detail
3-aminopropyltriethoxysilane	PNEC	Fresh water	0.33 mg/l	-
,	PNEC	Marine	0.033 mg/l	-
	PNEC	Sewage Treatment	13 mg/l	-
		Plant		
	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)

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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. : Not available. **Odour threshold**

pН : 11.3

Melting point/freezing point : Not applicable. : >68°C (>154.4°F)

Initial boiling point and

boiling range

Flash point : Closed cup: 103°C **Evaporation rate** Not available. Flammability (solid, gas) Not applicable. **Burning time** : Not applicable. **Burning rate** : Not applicable. : 0.8 - 4.5%

Upper/lower flammability or

explosive limits

: <0.01 kPa (<0.08 mm Hg) (at 20°C) Vapour pressure

: Not available. Vapour density : 0.95 g/cm3 @ 20 °C Relative density

Solubility(ies) : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/: 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.

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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	LogPow	BCF	Potential
3-aminopropyltriethoxysilane	1.7	3.4	low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : No.

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

vPvB

vP: Not available. vB: No.

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

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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 : No.

hazards

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 : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

Europe inventory : This material is listed or exempted.

Black List Chemicals : Not listed

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SECTION 15: Regulatory information

Industrial emissions (integrated pollution prevention and control) -

Air

Industrial emissions (integrated pollution prevention and control) -

Water

Chemical Weapons Convention List Schedule I

Chemicals

Chemical Weapons Convention List Schedule II

Chemicals

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
	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 CORROSION/IRRITATION - Category 1B Skin Corr. 1B, H314

Full text of abbreviated R

phrases

: R22- Harmful if swallowed.

R34- Causes burns.

Full text of classifications

[DSD/DPD]

Date of printing Date of issue/ Date of : C - Corrosive Xn - Harmful

revision

: 09.03.2018 : 09.03.2018

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Notice to reader

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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.

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