

### SeaQuest Tiecoat Comp B

### Section 1. Identification

| Product name                  | : SeaQuest Tiecoat Comp B   |
|-------------------------------|---|
| Chemical name                 | : 3-aminopropyltriethoxysilane  |
| Product code                  | : 40843   |
| Product description           | : Hardener.   |
| Product type                  | : Liquid.   |
| Other means of identification | <ul> <li>1-Propanamine, 3-(triethoxysilyl)-; aminopropyltriethoxysilane; 3-(Triethoxysilyl)<br/>propylamine; gamma-Aminopropyltriethoxysilane; 3-triethoxysilylpropan-1-amine;<br/>(3-Aminopropyl)triethoxysilane; APTES, APTS; 1-Propanamine, 3-triethoxysilyl-; γ-<br/>Aminopropyltriethoxysilane; Triethoxy(3-aminopropyl)silane; Triethoxy(gamma-<br/>aminopropyl)silane</li> </ul> |
| Supplier's details            | : EL MOHANDES JOTUN S.A.E.<br>INDUSTRIAL AREA - ISMAILIA<br>P.O. BOX NO. 203<br>ISMAILIA - EGYPT<br>FAX NO. : 002064481030<br>TELF NO: 002064481032<br>SDSJotun@jotun.com   |
| Emergency telephone<br>number | : SHE Dept. Jotun AS, Norway<br>+47 33 45 70 00   |

### Section 2. Hazards identification

| Classification of the substance or mixture | : ACUTE TOXICITY (oral) - Category 4<br>SKIN CORROSION/IRRITATION - Category 1B<br>SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1   |
|--|---|
| GHS label elements                         |   |
| Hazard pictograms                          |   |
| Signal word                                | : Danger.   |
| Hazard statements                          | : H302 - Harmful if swallowed.<br>H314 - Causes severe skin burns and eye damage.   |
| Precautionary statements                   |   |
| Prevention                                 | <ul> <li>P280 - Wear protective gloves: 1 - 4 hours (breakthrough time): butyl rubber; &lt; 1 hour (breakthrough time): polyvinyl chloride (PVC). Wear eye or face protection. Wear protective clothing.</li> <li>P270 - Do not eat, drink or smoke when using this product.</li> <li>P264 - Wash hands thoroughly after handling.</li> </ul> |

### Section 2. Hazards identification

| Response | <ul> <li>P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. P301 + P310 + P330 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 + P363 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. P305 + P351 + P338 + P310 - 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.</li> <li>P405 - Store locked up.</li> </ul> |
|----------|---|
| -        | ·   |
| Disposal | <ul> <li>P501 - Dispose of contents and container in accordance with all local, regional,<br/>national and international regulations.</li> </ul>  |

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

### Section 3. Composition/information on ingredients

| Substance/mixture             | : Substance   |
|-------------------------------|---|
| Chemical name                 | : 3-aminopropyltriethoxysilane  |
| Other means of identification | <ul> <li>1-Propanamine, 3-(triethoxysilyl)-; aminopropyltriethoxysilane; 3-(Triethoxysilyl) propylamine; gamma-Aminopropyltriethoxysilane; 3-triethoxysilylpropan-1-amine; (3-Aminopropyl)triethoxysilane; APTES, APTS; 1-Propanamine, 3-triethoxysilyl-; γ-Aminopropyltriethoxysilane; Triethoxy(3-aminopropyl)silane; Triethoxy(gamma-aminopropyl)silane</li> </ul> |

| CAS number/other identifiers |   |           |
|------------------------------|---|-----------|
| CAS number                   | : | 919-30-2  |
| EC number                    | 1 | 213-048-4 |
| Product code                 | 1 | 40843     |
|                              |   |           |

| Ingredient name              | %   | CAS number |
|------------------------------|-----|------------|
| 3-aminopropyltriethoxysilane | 100 | 919-30-2   |

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                                 | : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.  |  |
| Inhalation                                  | : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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. |  |

## Section 4. First aid measures

| Skin contact | : Get medical attention immediately. Call a poison center or physician. Flush<br>contaminated skin with plenty of water. Remove contaminated clothing and shoes.<br>Wash contaminated clothing thoroughly with water before removing it, or wear<br>gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated<br>promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly<br>before reuse.  |
|--------------|--|
| Ingestion    | : Get medical attention immediately. Call a poison center or physician. Wash out<br>mouth with water. Remove dentures if any. Remove victim to fresh air and keep at<br>rest in a position comfortable for breathing. If material has been swallowed and the<br>exposed person is conscious, give small quantities of water to drink. Stop if the<br>exposed person feels sick as vomiting may be dangerous. Do not induce vomiting<br>unless directed to do so by medical personnel. If vomiting occurs, the head should<br>be kept low so that vomit does not enter the lungs. Chemical burns must be treated<br>promptly by a physician. Never give anything by mouth to an unconscious person.<br>If unconscious, place in recovery position and get medical attention immediately.<br>Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or<br>waistband. |

| Most important symptoms/e     | <u>, acute and delayed</u>   |                |
|-------------------------------|--|----------------|
| Potential acute health effect |  |                |
| Eye contact                   | auses serious eye damage.  |                |
| Inhalation                    | o known significant effects or critical hazards.   |                |
| Skin contact                  | auses severe burns.  |                |
| Ingestion                     | armful if swallowed.   |                |
| Over-exposure signs/symp      |  |                |
| Eye contact                   | dverse symptoms may include the following:<br>ain<br>atering<br>edness   |                |
| Inhalation                    | o specific data.   |                |
| Skin contact                  | dverse symptoms may include the following:<br>ain or irritation<br>edness<br>istering may occur  |                |
| Ingestion                     | dverse symptoms may include the following:<br>omach pains  |                |
| Indication of immediate med   | ttention and special treatment needed, if necessary  |                |
| Notes to physician            | case of inhalation of decomposition products in a fire, symptoms may be<br>he exposed person may need to be kept under medical surveillance for 48   |                |
| Specific treatments           | o specific treatment.  |                |
| Protection of first-aiders    | o action shall be taken involving any personal risk or without suitable training<br>suspected that fumes are still present, the rescuer should wear an appropriate<br>ask or self-contained breathing apparatus. It may be dangerous to the per<br>roviding aid to give mouth-to-mouth resuscitation. Wash contaminated clor<br>poroughly with water before removing it, or wear gloves. | oriate<br>rson |

See toxicological information (Section 11)

### Section 5. Firefighting measures

| Extinguishing media            |   |
|--------------------------------|---|
| Suitable extinguishing media   | : Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | : None known.   |

Date of issue/Date of revision

: 31.08.2020 Date of previous issue

## Section 5. Firefighting measures

| -  | -   |
|--|---|
| Specific hazards arising from the chemical     | : 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:<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides<br>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.   |
| Special protective equipment for fire-fighters | <ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained<br/>breathing apparatus (SCBA) with a full face-piece operated in positive pressure<br/>mode.</li> </ul> |

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### Section 6. Accidental release measures

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| Personal precautions, protect  | CUV  | <u>e equipment and emergency procedures</u>   |
|--------------------------------|------|---|
| For non-emergency<br>personnel | :    | No action shall be taken involving any personal risk or without suitable training.<br>Evacuate surrounding areas. Keep unnecessary and unprotected personnel from<br>entering. Do not touch or walk through spilt material. Do not breathe vapour or mist.<br>Provide adequate ventilation. Wear appropriate respirator when ventilation is<br>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<br>and sewers. Inform the relevant authorities if the product has caused environmental<br>pollution (sewers, waterways, soil or air).   |
| Methods and material for con   | ntai | inment and cleaning up  |
| Small spill                    | :    | Stop leak if without risk. Move containers from spill area. Dilute with water and mop<br>up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry<br>material and place in an appropriate waste disposal container. Dispose of via a<br>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 (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

| Protective measures | : Put on appropriate personal protective equipment (see Section 8). Do not get in<br>eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during<br>normal use the material presents a respiratory hazard, use only with adequate<br>ventilation or wear appropriate respirator. Keep in the original container or an<br>approved alternative made from a compatible material, kept tightly closed when not<br>in use. Empty containers retain product residue and can be hazardous. Do not |
|---------------------|--|
|                     | reuse container.   |

# Section 7. Handling and storage

| Advice on general<br>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,<br>including any<br>incompatibilities | : | Store in accordance with local regulations. 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. Store locked up. 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<br>None.         Appropriate engineering<br>controls       : If user operations generate dust, fumes, gas, vapour or mist, use process<br>enclosures, local exhaust ventiliation or other engineering controls to keep worker<br>exposure to airborne contaminants below any recommended or statutory limits.         Environmental exposure<br>controls       : Emissions from ventiliation or work process equipment should be checked to ensure<br>they comply with the requirements of environmental protection legislation. In some<br>cases, fume scrubbers, filters or engineering modifications to the process<br>equipment will be necessary to reduce emissions to acceptable levels.         Individual protection measures       : Wash hands, forearms and face thoroughly after handling chemical products, before<br>eating, smoking and using the lavatory and at the end of the working period.<br>Appropriate techniques should be used to remove potentially contaminated clothing.<br>Wash contaminated clothing before reusing. Ensure that eyewases romplying to EM 166 should be used when a risk assessment<br>indicates this is necessary to avoid exposure to liquid splashes, mists, gases or<br>dusts. If contact is possible, the flokowing protection should be work in goegles and/<br>or face shield. If inhalation hazards exist, a full-face respirator may be required<br>instead.         Skin protection       : There is no one glove material or combination of materials that will give unlimited<br>resistance to any individual or combination of chemicals.<br>The breakthrough time must be greater than the end use time of the product.<br>The instructions and information provided by the glove manufacture on use,<br>storage, maintenance and replacement must be followed.<br>Gloves should be replaced regularly and if there is any sign of damage to the glove<br>material   | =                              |   |
|--|--------------------------------|---|
| None.         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.         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       : 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 theore 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 a higher degree of protection. Include by uon, unless the assessment indicates a higher degree of protection. Include by uon, 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       : 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 mancturer on use, storage, maintenance a   | Control parameters             |   |
| Appropriate engineering<br>controls       : If user operations generate dust, fumes, gas, vapour or mist, use process<br>enclosures, local exhaust ventilation or other engineering controls to keep worker<br>exposure to aitborne contaminants below any recommended or statutory limits.         Environmental exposure       : Emissions from ventilation or work process equipment should be checked to ensure<br>they comply with the requirements of environmental protection legislation. In some<br>cases, fume scrubbers, filters or engineering modifications to the process<br>equipment will be necessary to reduce emissions to acceptable levels.         Individual protection measures       : Wash hands, forearms and face thoroughly after handling chemical products, before<br>eating, smoking and using the lavatory and at the end of the working period.<br>Appropriate techniques should be used to remove potentially contaminated clothing.<br>Wash contaminated clothing before reusing. Ensure that eyewash stations and<br>safety showers are close to the workstation location.         Eye/face protection       : Safety eyewear complying to EN 166 should be used when a risk assessment<br>indicates this is necessary to avoid exposure to liquid splashes, mists, gases or<br>dusts. If contact is possible, the following protection should be worn, unless the<br>assessment indicates a higher degree of protection: chemical splash goggles and/<br>or face shield. If inhalation hazards exist, a full-face respirator may be required<br>instead.         Skin protection       : There is no one glove material or combination of materials that will give unlimited<br>resistance to any individual or combination of chemicals.<br>The breakthrough time must be greater than the end use time of the product.<br>The instructions and information provided by the glove manufacturer on use,<br>storage, maintenance and replacement must be follo  | Occupational exposure lin      | <u>nits</u>   |
| controls       enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.         Environmental exposure       : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, furme scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Individual protection 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.         Eyelface protection       : Safety eyewear complying to EN 166 should be used when a risk assessment indicates his is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be working geles and/or aface shield. If inhalation hazards exist, a full-face respirator may be required instead.         Skin 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 use   | None.                          |   |
| controls       enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.         Environmental exposure       : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, furme scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.         Individual protection 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.         Eyelface protection       : Safety eyewear complying to EN 166 should be used when a risk assessment indicates his is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be working geles and/or aface shield. If inhalation hazards exist, a full-face respirator may be required instead.         Skin 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 use   |                                |   |
| controls       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       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       : 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 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 sui  |                                | enclosures, local exhaust ventilation or other engineering controls to keep worker  |
| 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       : 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) 4 - 1 hour: polyvinyl chloride (PVC)  |                                | they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process   |
| <ul> <li>eating, smoking and using the lavatory and at the end of the working period.<br/>Appropriate techniques should be used to remove potentially contaminated clothing.<br/>Wash contaminated clothing before reusing. Ensure that eyewash stations and<br/>safety showers are close to the workstation location.</li> <li>Eye/face protection</li> <li>Safety eyewear complying to EN 166 should be used when a risk assessment<br/>indicates this is necessary to avoid exposure to liquid splashes, mists, gases or<br/>dusts. If contact is possible, the following protection should be worn, unless the<br/>assessment indicates a higher degree of protection should be worn, unless the<br/>assessment indicates a higher degree of protection should be worn, unless the<br/>assessment indicates a higher degree of protection should be worn, unless the<br/>assessment indicates a higher degree of protection should be worn, unless the<br/>assessment indicates a higher degree of protection should be worn, unless the<br/>assessment indicates a higher degree of protections.<br/>The resistance to any individual or combination of materials that will give unlimited<br/>resistance to any individual or combination of chemicals.<br/>The breakthrough time must be greater than the end use time of the product.<br/>The instructions and information provided by the glove manufacturer on use,<br/>storage, maintenance and replacement must be followed.<br/>Gloves should be replaced regularly and if there is any sign of damage to the glove<br/>material.<br/>Always ensure that gloves are free from defects and that they are stored and used<br/>correctly.<br/>The performance or effectiveness of the glove may be reduced by physical/chemical<br/>damage and poor maintenance.<br/>Barrier creams may help to protect the exposed areas of the skin but should not be<br/>applied once exposure has occurred.<br/>Wear suitable gloves (breakthrough time) 4 - 8 hours: butyl rubber<br/>Not recommended, gloves(breakthrough time) &lt; 1 hour: polyvinyl chloride (PVC)</li> </ul> | Individual protection measure  | <u>ures</u>   |
| 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       • 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) < 1 hour: polyvinyl chloride (PVC)  | Hygiene measures               | eating, smoking and using the lavatory and at the end of the working period.<br>Appropriate techniques should be used to remove potentially contaminated clothing.<br>Wash contaminated clothing before reusing. Ensure that eyewash stations and   |
| Hand protection       : There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.<br>The breakthrough time must be greater than the end use time of the product.<br>The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.<br>Gloves should be replaced regularly and if there is any sign of damage to the glove material.<br>Always ensure that gloves are free from defects and that they are stored and used correctly.<br>The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.<br>Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.<br>Wear suitable gloves tested to EN374.<br>For prolonged or repeated handling, use the following type of gloves:<br>May be used, gloves(breakthrough time) 4 - 8 hours: butyl rubber<br>Not recommended, gloves(breakthrough time) < 1 hour: polyvinyl chloride (PVC)   | Eye/face protection            | indicates this is necessary to avoid exposure to liquid splashes, mists, gases or<br>dusts. If contact is possible, the following protection should be worn, unless the<br>assessment indicates a higher degree of protection: chemical splash goggles and/<br>or face shield. If inhalation hazards exist, a full-face respirator may be required  |
| resistance to any individual or combination of chemicals.<br>The breakthrough time must be greater than the end use time of the product.<br>The instructions and information provided by the glove manufacturer on use,<br>storage, maintenance and replacement must be followed.<br>Gloves should be replaced regularly and if there is any sign of damage to the glove<br>material.<br>Always ensure that gloves are free from defects and that they are stored and used<br>correctly.<br>The performance or effectiveness of the glove may be reduced by physical/chemical<br>damage and poor maintenance.<br>Barrier creams may help to protect the exposed areas of the skin but should not be<br>applied once exposure has occurred.<br>Wear suitable gloves tested to EN374.<br>For prolonged or repeated handling, use the following type of gloves:<br>May be used, gloves(breakthrough time) 4 - 8 hours: butyl rubber<br>Not recommended, gloves(breakthrough time) < 1 hour: polyvinyl chloride (PVC)  | Skin protection                |   |
| Date of issue/Date of revision: 31.08.2020Date of previous issue: 31.08.2020Version: 1.015/10  |                                | <ul> <li>resistance to any individual or combination of chemicals.</li> <li>The breakthrough time must be greater than the end use time of the product.</li> <li>The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.</li> <li>Gloves should be replaced regularly and if there is any sign of damage to the glove material.</li> <li>Always ensure that gloves are free from defects and that they are stored and used correctly.</li> <li>The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.</li> <li>Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.</li> <li>Wear suitable gloves tested to EN374.</li> <li>For prolonged or repeated handling, use the following type of gloves:</li> </ul> |
|  | Date of issue/Date of revision | : 31.08.2020 Date of previous issue : 31.08.2020 Version : 1.01 5/10  |

|  | D | ate of issue/Date of revision | : 31.08.2020 | Date of previous issue | : 31.08.2020 | Version | : 1.01 | 5/ |
|--|---|-------------------------------|--------------|------------------------|--------------|---------|--------|----|
|--|---|-------------------------------|--------------|------------------------|--------------|---------|--------|----|

### Section 8. Exposure controls/personal protection

| •                      | · · ·   |
|------------------------|---|
| 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  | <ul> <li>Appropriate footwear and any additional skin protection measures should be<br/>selected based on the task being performed and the risks involved and should be<br/>approved by a specialist before handling this product.</li> </ul>   |
| 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. |

## Section 9. Physical and chemical properties

| <u>Appearance</u>                            |  |  |
|--|--|--|
| Physical state                               | : Liquid.  |  |
| Colour                                       | : Various colours.   |  |
| Odour  | Characteristic.  |  |
| Odour threshold                              | Not applicable.  |  |
| рН   | : 11.3   |  |
| Melting point                                | Not applicable.  |  |
| Boiling point                                | : >68°C (>154.4°F)   |  |
| Flash point                                  | : Closed cup: 103°C (217.4°F)  |  |
| Evaporation rate                             | Not available.   |  |
| Flammability (solid, gas)                    | Not applicable.  |  |
| Lower and upper explosive (flammable) limits | : 0.8 - 4.5%   |  |
| Vapour pressure                              | : <0.01 kPa (<0.08 mm Hg) (at 20°C)  |  |
| Vapour density                               | Not available.   |  |
| Density                                      | : 0.95 g/cm³ @ 20 °C   |  |
| Solubility                                   | : Insoluble in the following materials: cold water and hot water.  |  |
| Partition coefficient: n-<br>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)<br>Kinematic (23 °C): 0.02 cm²/s (2 mm²/s)<br>Kinematic (40°C): >0.205 cm²/s (>20.5 mm²/s) |  |

# Section 10. Stability and reactivity

| Reactivity                            | specific test data related to r                       | reactivity available for this product or its ingredients. |
|---------------------------------------|---|---|
| Chemical stability                    | product is stable.                                    |   |
| Possibility of hazardous<br>reactions | er normal conditions of stor                          | age and use, hazardous reactions will not occur.          |
| Conditions to avoid                   | specific data.  |   |
| Incompatible materials                | specific data.  |   |
| Hazardous decomposition products      | ler normal conditions of stor<br>uld not be produced. | age and use, hazardous decomposition products             |

### Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

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

#### Irritation/Corrosion

Not available.

#### **Sensitisation**

Not available.

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

#### Information on likely routes : Not available.

of exposure

#### 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.                             |

#### Symptoms related to the physical, chemical and toxicological characteristics

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

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure Short term exposure

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### Section 11. Toxicological information

|                                |     | 0   |
|--------------------------------|-----|---|
| Potential immediate<br>effects | :   | Not available.                                    |
| Potential delayed effects      | 1   | Not available.                                    |
| Long term exposure             |     |   |
| Potential immediate<br>effects | :   | Not available.                                    |
| Potential delayed effects      | :   | Not available.                                    |
| Potential chronic health eff   | ect | <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. |
| <b>Developmental effects</b>   | :   | 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  |
|-------|------------|
| Oral  | 1780 mg/kg |

### Section 12. Ecological information

#### **Toxicity**

Not available.

#### Persistence and degradability

Not available.

#### **Bioaccumulative potential**

| Product/ingredient name      | LogPow | BCF | Potential |
|------------------------------|--------|-----|-----------|
| 3-aminopropyltriethoxysilane | 1.7    | 3.4 | low       |

#### **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.<br>Disposal of this product, solutions and any by-products should at all times comply<br>with the requirements of environmental protection and waste disposal legislation<br>and any regional local authority requirements. Dispose of surplus and non-<br>recyclable products via a licensed waste disposal contractor. Waste should not be<br>disposed of untreated to the sewer unless fully compliant with the requirements of<br>all authorities with jurisdiction. Waste packaging should be recycled. Incineration or<br>landfill should only be considered when recycling is not feasible. This material and<br>its container must be disposed of in a safe way. Care should be taken when |
|------------------|--|
|------------------|--|

### Section 13. Disposal considerations

handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

### Section 14. Transport information

|                               | •  |  |  |
|-------------------------------|--|--|--|
|                               | ADR/RID  | IMDG   | ΙΑΤΑ   |
| UN number                     | UN2735   | UN2735   | UN2735   |
| UN proper<br>shipping name    | Polyamines, liquid, corrosive,<br>n.o.s.<br>(3-aminopropyltriethoxysilane) | Polyamines, liquid, corrosive,<br>n.o.s.<br>(3-aminopropyltriethoxysilane) | Polyamines, liquid, corrosive,<br>n.o.s.<br>(3-aminopropyltriethoxysilane) |
| Transport hazard<br>class(es) | 8  | 8  | 8  |
| Packing group                 | П  | 11   | 11   |
| Environmental<br>hazards      | No.  | No.  | No.  |
| Additional information        | -  | Emergency schedules F-A,<br>S-B  | -  |

| Additional information                                |   |   |
|---|---|---|
| ADR/RID   | : | <u>Hazard identification number</u> 80<br><u>Tunnel code</u> (E)  |
| IMDG  | : | Emergency schedules F-A, S-B  |
|   |   | Segregation Group: 18 - Alkalis   |
| Special precautions for user                          | : | <b>Transport within user's premises:</b> 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 to Annex II of Marpol and | : | Not available.  |

the IBC Code

### Section 15. Regulatory information

1

Safety, health and environmental regulations specific for the product No known specific national and/or regional regulations applicable to this product (including its ingredients).

#### International regulations

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

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

### Section 15. Regulatory information

Not listed.

### Section 16. Other information

| <u>History</u>                 |  |
|--------------------------------|--|
| Date of printing               | : 31.08.2020   |
| Date of issue/Date of revision | : 31.08.2020   |
| Date of previous issue         | : 31.08.2020   |
| Version                        | : 1.01   |
| Key to abbreviations           | <ul> <li>ATE = Acute Toxicity Estimate<br/>BCF = Bioconcentration Factor<br/>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br/>IATA = International Air Transport Association<br/>IBC = Internediate Bulk Container<br/>IMDG = International Maritime Dangerous Goods<br/>LogPow = logarithm of the octanol/water partition coefficient<br/>MARPOL = International Convention for the Prevention of Pollution From Ships,<br/>1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br/>UN = United Nations</li> </ul> |
| 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.