## SAFETY DATA SHEET



## Jotatemp 210 Comp B

## Section 1. Identification of the substance/mixture and of the company/undertaking

| GHS product identifier           | : Jotatemp 210 Comp B |
|----------------------------------|-----------------------|
| Product code                     | : 39823               |
| Other means of<br>identification | : Not available.      |
| Product description              | : Hardener.           |
| Product type                     | : Liquid.             |

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

Use in coatings - Professional use

| Manufacturing country         | : Jotun Thailand Limited<br>700/353 Amata Nakorn Industrial Estate (BIP 2)<br>Moo 6, Tumbol Donhualoh, Amphur Muang Chonburi<br>Chonburi 20000 Thailand |
|-------------------------------|---|
|                               | Phone: + 66 2 022 9888<br>Fax: + 66 2 022 9888 , + 66 38 214 375  |
|                               | SDSJotun@jotun.com  |
| Emergency telephone<br>number | : Jotun Thailand Limited<br>Phone: + 66 2 022 9888 ext. 2100, 2400, 2402  |

## Section 2. Hazards identification

| Classification of the substance or mixture | <ul> <li>FLAMMABLE LIQUIDS - Category 3<br/>ACUTE TOXICITY (oral) - Category 5<br/>SKIN CORROSION/IRRITATION - Category 1<br/>SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1<br/>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract<br/>irritation) - Category 3<br/>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3</li> </ul> |
|--|--|
| GHS label elements                         |  |
| Hazard pictograms                          |  |
| Signal word                                | : Danger.  |

## Section 2. Hazards identification

| Hazard statements        | <ul> <li>H226 - Flammable liquid and vapour.</li> <li>H303 - May be harmful if swallowed.</li> <li>H314 - Causes severe skin burns and eye damage.</li> <li>H335 - May cause respiratory irritation.</li> <li>H412 - Harmful to aquatic life with long lasting effects.</li> </ul>   |
|--------------------------|--|
| Precautionary statements | ····· - ······························   |
| Prevention               | <ul> <li>P280 - Wear protective gloves, protective clothing and eye or face protection.</li> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P273 - Avoid release to the environment.</li> <li>P261 - Avoid breathing vapour.</li> </ul>  |
| Response                 | <ul> <li>P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor.<br/>P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON<br/>CENTER or doctor. Rinse mouth. Do NOT induce vomiting.<br/>P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all<br/>contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER<br/>or doctor.</li> <li>P363 - Wash contaminated clothing before reuse.</li> <li>P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several<br/>minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br/>Immediately call a POISON CENTER or doctor.</li> </ul> |
| Storage                  | <ul> <li>P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.</li> <li>P403 + P235 - Keep cool.</li> </ul>   |
| Disposal                 | : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.   |

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

## Section 3. Composition/information on ingredients

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

| Ingredient name                       | %         | CAS number |
|---------------------------------------|-----------|------------|
| xylene                                | ≥10 - <22 | 1330-20-7  |
| butan-1-ol                            | ≥10 - <20 | 71-36-3    |
| ethylbenzene                          | <10       | 100-41-4   |
| 2,4,6-tris(dimethylaminomethyl)phenol | ≤7        | 90-72-2    |

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.

## Section 4. First aid measures

| 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. |
|--------------|---|
| 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. 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/effects, acute and delayed

| Potential acute health effe    | cts   |
|--------------------------------|---|
| Eye contact                    | Causes serious eye damage.  |
| Inhalation                     | : May cause respiratory irritation.   |
| Skin contact                   | : Causes severe burns.  |
| Ingestion                      | : May be harmful if swallowed.  |
| Over-exposure signs/symp       | <u>itoms</u>  |
| Eye contact                    | : Adverse symptoms may include the following:<br>pain<br>watering<br>redness  |
| Inhalation                     | : Adverse symptoms may include the following:<br>respiratory tract irritation<br>coughing   |
| 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   |
| Indication of immediate me     | dical attention and special treatment needed, if necessary  |
| Notes to physician             | : In case of inhalation of decomposition products in a fire, symptoms may be delayed.<br>The exposed person may need to be kept under medical surveillance for 48 hours.  |
| Specific treatments            | : No specific treatment.  |
| Protection of first-aiders     | : No action shall be taken involving any personal risk or without suitable training. 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. |
| Date of issue/Date of revision | : 30.01.2025 3/12   |

## Section 4. First aid measures

See toxicological information (Section 11)

### Section 5. Firefighting measures

| Extinguishing media                            |  |
|--|--|
| Suitable extinguishing media                   | : Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.   |
| Unsuitable extinguishing media                 | : Do not use water jet.  |
| Specific hazards arising from the chemical     | : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard.<br>In a fire or if heated, a pressure increase will occur and the container may burst, with<br>the risk of a subsequent explosion. This material is harmful to aquatic life with long<br>lasting effects. Fire water contaminated with this material must be contained and<br>prevented from being discharged to any waterway, sewer or drain. |
| Hazardous thermal decomposition products       | : Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides  |
| Special protective actions for fire-fighters   | : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.   |
| Special protective equipment for fire-fighters | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.  |
|  |  |

## Section 6. Accidental release measures

| Personal precautions, protect                        | tiv | e equipment and emergency procedures  |
|--|-----|---|
| 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. Shut off all ignition sources.<br>No flares, smoking or flames in hazard area. 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). Water polluting material. May be harmful<br>to the environment if released in large quantities.   |
| Methods and material for containment and cleaning up |     |   |
|  |     |   |

Small spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and<br/>explosion-proof equipment. Dilute with water and mop up if water-soluble.<br/>Alternatively, or if water-insoluble, absorb with an inert dry material and place in an<br/>appropriate waste disposal container. Dispose of via a licensed waste disposal<br/>contractor.

## Section 6. Accidental release measures

| Large spill | : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non- |
|-------------|---|
|             | combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13).  |
|             | Dispose of via a licensed waste disposal contractor. Contaminated absorbent   |
|             | material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.  |

## Section 7. Handling and storage

| Precautions for safe handling                                      |   |   |
|--|---|---|
| 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. Avoid<br>release to the environment. Use only with adequate ventilation. Wear appropriate<br>respirator when ventilation is inadequate. Do not enter storage areas and confined<br>spaces unless adequately ventilated. Keep in the original container or an approved<br>alternative made from a compatible material, kept tightly closed when not in use.<br>Store and use away from heat, sparks, open flame or any other ignition source. Use<br>explosion-proof electrical (ventilating, lighting and material handling) equipment.<br>Use only non-sparking tools. Take precautionary measures against electrostatic<br>discharges. Empty containers retain product residue and can be hazardous. Do not<br>reuse container. |
| 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 a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.  |

## Section 8. Exposure controls/personal protection

#### **Control parameters**

#### **Occupational exposure limits**

| Ingredient name | Exposure limits                       |
|-----------------|---------------------------------------|
| xylene          | Ministry of Labor (Thailand, 8/2017). |
|                 | [xylene (o-, m-, p- isomers)]         |
|                 | TWA: 100 ppm 8 hours.                 |
| butan-1-ol      | Ministry of Labor (Thailand, 8/2017). |
|                 | TWA: 100 ppm 8 hours.                 |
| ethylbenzene    | Ministry of Labor (Thailand, 8/2017). |
|                 | TWA: 100 ppm 8 hours.                 |

## Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

## Section 8. Exposure controls/personal protection

| Environmental exposure<br>controls         Emissions from ventilation or work process equipment should be deekded on ensure<br>days 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 throughly after handling chemical products, before<br>eating, smoking and using the lavatory and a the end of the working period.<br>Appropriate techniques should be used to remove potentially contaminated colhing.<br>Wash contaminated doiling before reusing. Ensure that eyewash stations and<br>safety showers are close to the workstation location.           Eyefface protection         : Safety apprear complying to 150 15371-12022 should be used when a risk<br>gases or rules. If contact in social exposure to liquid splates, mids,<br>gases or rules. If contact in social exposure to liquid splates, mids,<br>gases or rules. If contact in social exposure to liquid splates, mids,<br>gases or rules. If contact in social exposure to liquid splates, mids,<br>gases or rules. If contact in social exposure to liquid splates, mids,<br>gases or rules. If contact in social explation products if a risk assessment indicates<br>this is necessary. Considering the parameters specified by the give manufacturer,<br>check during use that the gives are still relating their protective properties. It<br>should be notice, the protection than of the gives cannot be accurately<br>estimated.           Hand protection         : Chemical-resistant, impervious gloves complying with an approved standard should<br>be worn at all times when handing chemical products in the cacurately<br>estimated.           Bound be induced.         : Chemical-resistant, impervious gloves are still exting the anditactive or use,<br>storage, maintenance and replacement must be followed.<br>The issuedbarestof t   | •                              |   |
|---|--------------------------------|---|
| Hygiene measures       : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lawday mat at the end of the working period. Appropriate techniques should be used to remove not full working period. Appropriate techniques should be used to remove not full expendence on anter should be used to remove not full expendence on anter should be used to remove not full expendence on anter should be used to remove not full expension.         Eye/face protection       : Safety eyewear complying to ISO 16321-12022 should be used when a risk assessment indicates this is necessary to avid at exposure to liquid splashes, mists, gases or dusts. If contact is passible, the following protection chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.         Skin protection       : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates the inter to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.         There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use lime of the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance on effectiveness of the glove may be reduced by physical/chemical damage and poor waintenance.         Barrier creams may help to protect the exposed areas of the skin but should not be appiled once exposure has occurred.       Maways ensure that   |                                | they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process   |
| 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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.         Eye/face protection       : Safety eyewaer complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid pulsahes, mists, gases or dusts. If ontakits is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection should be worn, unless the assessment indicates a higher degree of protection should be worn, equired instead.         Skin protection       : Chemical-resistant, impervious gloves complying with an approved standard should be word at litting: when manding chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still relating their protective properties. It should be noted that the time to breakthrough time protective properties. It should be noted that the time to breakthrough time of the gloves cannot be accurately estimated.         There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of materials that will give unlimited resistance to any individual or combination of thermicals grouts: The orackthrough time and replacement must be glowed.         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 breakthrough time as occcurred.       Wear suitable gloves (freakthro  | Individual protection measu    | res   |
| 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       • Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breathetth twoigh for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves manufacturer, one secosary. Combination of materials that will give unlimited resistance to any individual or combination of materials that will give unlimited resistance to any individual or combination of dhemicals. The breakthrough time must be greater than the end use time of 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 anintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. Ways usual be (>0.07 mm), neoprene (>0.05 mm), phytipal clohel (>0.07 mm). Represent (>0.05 mm), phytipal clohel (>0.07 mm). The performed are real and any doticue and should be approved by a specialist before handing this   | 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   |
| <ul> <li>Hand protection</li> <li>Chemical-resistant, impervious gloves complying with an approved standard should be worm at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.</li> <li>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.</li> <li>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.</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 (breakthrough time) 4 - 8 hours: Viton® (&gt; 0.7 mm), neoprene (&gt; 0.36 mm), buty tubber (&gt; 0.4 mm)</li> <li>Recommended, gloves(breakthrough time) 4 - 8 hours: 4H/Silver Shield® (&gt; 0.07 mm), Teflon (&gt; 0.35 mm), intrife rubber (&gt; 0.75 mm), polyvinyl alcohol (PVA) (&gt; 0.3 mm)</li> <li>Body protection</li> <li>Use chemical-resistant protective suit / disposable overall.</li> <li>Personal protective equipment for the body should be seproved by a specialist before handling this product. When there is a risk of ignition from static discharges, clothing should</li></ul>  | Eye/face protection            | 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  |
| <ul> <li>be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.</li> <li>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.</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 ISO 374-1:2016. Not recommended, gloves(breakthrough time) 4 - 8 hours: Vito® (&gt; 0.7 mm), neoprene (&gt; 0.35 mm), butly tuber (&gt; 0.4 mm)</li> <li>Recommended, gloves(breakthrough time) 4 - 8 hours: Wito® (&gt; 0.7 mm), neoprene (&gt; 0.35 mm), nitrile ruber coverall.</li> <li>Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition if from static electricity, wear anti-static protective cloting. For the greatest and gloves.</li> <li>O</li></ul>   | Skin protection                |   |
| <ul> <li>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 ISO 374-1:2016.<br/>Not recommended, gloves(breakthrough time) &gt; 1 hour: PVC (&gt; 0.5 mm)<br/>May be used, gloves(breakthrough time) &gt; 1 hour: PVC (&gt; 0.5 mm)<br/>May be used, gloves(breakthrough time) &gt; 8 hours: Viton® (&gt; 0.7 mm), neoprene<br/>(&gt; 0.35 mm), butyl rubber (&gt; 0.4 mm)<br/>Recommended, gloves(breakthrough time) &gt; 8 hours: 4H/Silver Shield® (&gt; 0.07<br/>mm), Teflon (&gt; 0.35 mm), nitrile rubber (&gt; 0.75 mm), polyvinyl alcohol (PVA) (&gt; 0.3<br/>mm)</li> <li>Body protection</li> <li>Use chemical-resistant protective suit / disposable overall.<br/>Personal protective equipment for the body should be selected based on the task<br/>being performed and the risks involved and should be approved by a specialist<br/>before handling this product. When there is a risk of giniton from static electricity,<br/>wear anti-static protective clothing. For the greatest protection from static<br/>discharges, clothing should include anti-static overalls, boots and gloves.</li> <li>Appropriate footwear and any additional skin protection measures should be<br/>approved by a specialist before handling this product.</li> <li>Based on the hazard and potential for exposure, select a respirator that meets the<br/>appropriate standard or certification. Respirators must be used according to a<br/>respiratory protection program to ensure proper fitting, training, and ot</li></ul> | Hand protection                | be worn at all times when handling chemical products if a risk assessment indicates<br>this is necessary. Considering the parameters specified by the glove manufacturer,<br>check during use that the gloves are still retaining their protective properties. It<br>should be noted that the time to breakthrough for any glove material may be<br>different for different glove manufacturers. In the case of mixtures, consisting of<br>several substances, the protection time of the gloves cannot be accurately |
| 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 ISO 374-1:2016.<br>Not recommended, gloves(breakthrough time) < 1 hour: PVC (> 0.5 mm)<br>May be used, gloves(breakthrough time) < 1 hour: PVC (> 0.5 mm), neoprene (> 0.35 mm), butly rubber (> 0.4 mm)<br>Recommended, gloves(breakthrough time) > 8 hours: VHO® (> 0.7 mm), neoprene (> 0.35 mm), nitrile rubber (> 0.75 mm), polyvinyl alcohol (PVA) (> 0.3 mm)         Body protection       : Use chemical-resistant protective suit / disposable overall.<br>Personal protective equipment for the body should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.         Other skin protection       : Appropriate footwear and any additional skin protection measures should be approved by a specialist before handling this product.         Respiratory protection       : Based on the task being performed and the risks involved and should be approved by a specialist before handling this product.   |                                |   |
| 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 ISO 374-1:2016.         Not recommended, gloves(breakthrough time) < 1 hour: PVC (> 0.5 mm)         May be used, gloves(breakthrough time) < 1 hour: PVC (> 0.5 mm)         May be used, gloves(breakthrough time) < 4 - 8 hours: Viton® (> 0.7 mm), neoprene (> 0.35 mm), butyl rubber (> 0.4 mm)         Recommended, gloves(breakthrough time) > 8 hours: 4H/Silver Shield® (> 0.07 mm), Teflon (> 0.35 mm), nitrile rubber (> 0.75 mm), polyvinyl alcohol (PVA) (> 0.3 mm)         Body protection       : Use chemical-resistant protective suit / disposable overall.         Personal protective equipment for the body should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective equipment for the body should be approved by a specialist before handling this product. When there is a risk of ignition from static discharges, clothing should include anti-static overalls, boots and gloves.         Other skin protection       : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.         Respiratory protection       : Appropriate footwear and any additional skin protection measures shoul  |                                | 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.  |
| Wear suitable gloves tested to ISO 374-1:2016.         Not recommended, gloves(breakthrough time) < 1 hour: PVC (> 0.5 mm)         May be used, gloves(breakthrough time) 4 - 8 hours: Viton® (> 0.7 mm), neoprene         (> 0.35 mm), butyl rubber (> 0.4 mm)         Recommended, gloves(breakthrough time) > 8 hours: 4H/Silver Shield® (> 0.07 mm), Teflon (> 0.35 mm), nitrile rubber (> 0.75 mm), polyvinyl alcohol (PVA) (> 0.3 mm)         Body protection       : Use chemical-resistant protective suit / disposable overall.         Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.         Other skin protection       : Appropriate footwear and any additional skin protection measures should be approved by a specialist before handling this product.         Respiratory protection       : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.  |                                | 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  |
| Personal protective equipment for the body should be selected based on the task<br>being performed and the risks involved and should be approved by a specialist<br>before handling this product. When there is a risk of ignition from static electricity,<br>wear anti-static protective clothing. For the greatest protection from static<br>discharges, clothing should include anti-static overalls, boots and gloves.Other skin protection: 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.Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the<br>appropriate standard or certification. Respirators must be used according to a<br>respiratory protection program to ensure proper fitting, training, and other important<br>aspects of use.  |                                | Wear suitable gloves tested to ISO 374-1:2016.<br>Not recommended, gloves(breakthrough time) < 1 hour: PVC (> 0.5 mm)<br>May be used, gloves(breakthrough time) 4 - 8 hours: Viton® (> 0.7 mm), neoprene<br>(> 0.35 mm), butyl rubber (> 0.4 mm)<br>Recommended, gloves(breakthrough time) > 8 hours: 4H/Silver Shield® (> 0.07<br>mm), Teflon (> 0.35 mm), nitrile rubber (> 0.75 mm), polyvinyl alcohol (PVA) (> 0.3  |
| Personal protective equipment for the body should be selected based on the task<br>being performed and the risks involved and should be approved by a specialist<br>before handling this product. When there is a risk of ignition from static electricity,<br>wear anti-static protective clothing. For the greatest protection from static<br>discharges, clothing should include anti-static overalls, boots and gloves.Other skin protection: 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.Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the<br>appropriate standard or certification. Respirators must be used according to a<br>respiratory protection program to ensure proper fitting, training, and other important<br>aspects of use.  | Body protection                | : Use chemical-resistant protective suit / disposable overall.  |
| <ul> <li>Respiratory protection</li> <li>Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.</li> </ul>  |                                | Personal protective equipment for the body should be selected based on the task<br>being performed and the risks involved and should be approved by a specialist<br>before handling this product. When there is a risk of ignition from static electricity,<br>wear anti-static protective clothing. For the greatest protection from static  |
| appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.   | Other skin protection          | selected based on the task being performed and the risks involved and should be   |
| Date of issue/Date of revision : 30.01.2025 6/12  | Respiratory protection         | appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important   |
|   | Date of issue/Date of revision | : 30.01.2025 6/12   |

## Section 8. Exposure controls/personal 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 and safety characteristics

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

| <u>Appearance</u>                                       |   |  |
|---|---|--|
| Physical state  | 1 | Liquid.  |
| Colour  | 4 | Colourless.  |
| Odour   | 4 | Characteristic.  |
| Odour threshold   | 1 | Not available.   |
| рН  | 4 | Not applicable.  |
| Melting point/freezing point                            | 1 | Not applicable.  |
| Boiling point, initial boiling point, and boiling range | : | Lowest known value: 119°C (246.2°F) (butan-1-ol). Weighted average: 129.95°C (265.9°F)                               |
| Flash point   | 1 | Closed cup: 26°C (78.8°F)  |
| Evaporation rate  | : | Highest known value: 0.84 (ethylbenzene) Weighted average: 0.66compared with butyl acetate                           |
| Flammability  | 1 | Not applicable.  |
| Lower and upper explosion limit/flammability limit      | : | Greatest known range: Lower: 1.4% Upper: 11.3% (butan-1-ol)  |
| Vapour pressure   | 1 | Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.85 kPa (6.38 mm Hg) (at 20°C) |
| Relative vapour density                                 | 4 | Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.3 (Air = 1)   |
| Relative density  | 1 | 0.924 g/cm <sup>3</sup>  |
| Solubility  | 1 | cold water Not soluble<br>hot water Not soluble  |
| Partition coefficient: n-<br>octanol/water              | : | Not available.   |
| Auto-ignition temperature                               | 4 | Lowest known value: 355°C (671°F) (butan-1-ol).  |
| Decomposition temperature                               | 4 | Not available.   |
| Viscosity   | 4 | Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt)  |
| Flow time (ISO 2431)                                    | : | Not available.   |
| Particle characteristics                                |   |  |
| Median particle size                                    | : | Not applicable.  |

## Section 10. Stability and reactivity

| Reactivity                         | 1 | No specific test data related to reactivity available for this product or its ingredients.  |
|------------------------------------|---|---|
| Chemical stability                 | : | The product is stable.  |
| Possibility of hazardous reactions | : | Under normal conditions of storage and use, hazardous reactions will not occur.   |
| Conditions to avoid                | : | Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |

## Section 10. Stability and reactivity

| Incompatible materials | : Keep away from the following materials to prevent strong exothermic reactions: |
|------------------------|--|
|                        | oxidising agents, strong alkalis, strong acids.                                  |

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

#### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name         | Result                 | Species    | Dose        | Exposure |
|---------------------------------|------------------------|------------|-------------|----------|
| xylene                          | LC50 Inhalation Vapour | Rat        | 11 mg/l     | 4 hours  |
|                                 | LD50 Oral              | Rat        | 4300 mg/kg  | -        |
|                                 | TDLo Dermal            | Rabbit     | 4300 mg/kg  | -        |
| butan-1-ol                      | LD50 Oral              | Rat        | 790 mg/kg   | -        |
| ethylbenzene                    | LC50 Inhalation Vapour | Rat - Male | 11 mg/l     | 4 hours  |
| ,                               | LD50 Dermal            | Rabbit     | >5000 mg/kg | -        |
|                                 | LD50 Oral              | Rat        | 3500 mg/kg  | -        |
| 2,4,6-tris                      | LD50 Oral              | Rat        | 1673 mg/kg  | -        |
| (dimethylaminomethyl)<br>phenol |                        |            |             |          |

#### Irritation/Corrosion

| Product/ingredient name                       | Result                                       | Species       | Score | Exposure                                   | Observation |
|---|--|---------------|-------|--|-------------|
| xylene  | Eyes - Mild irritant<br>Skin - Mild irritant | Rabbit<br>Rat | -     | 87 milligrams<br>8 hours 60<br>microliters | -           |
| 2,4,6-tris<br>(dimethylaminomethyl)<br>phenol | Eyes - Severe irritant                       | Rabbit        | -     | 24 hours 50<br>µg                          | -           |
|   | Skin - Severe irritant                       | Rat           | -     | 0.25 ml                                    | -           |

#### **Sensitisation**

Not available.

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### Reproductive toxicity

Not available.

#### **Teratogenicity**

Not available.

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

| Product/ingredient name | Category   | Route of exposure | Target organs                |
|-------------------------|------------|-------------------|------------------------------|
| xylene                  | Category 3 | -                 | Respiratory tract irritation |
| butan-1-ol              | Category 3 | -                 | Respiratory tract irritation |
|                         | Category 3 |                   | Narcotic effects             |

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

| Product/ingredient name | Category   | Route of exposure | Target organs  |
|-------------------------|------------|-------------------|----------------|
| ethylbenzene            | Category 2 | -                 | hearing organs |

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## Section 11. Toxicological information

# Aspiration hazard Product/ingredient name Result xylene ASPIRATION HAZARD - Category 1 ethylbenzene ASPIRATION HAZARD - Category 1

| Information on likely routes of exposure | :         | Not available.   |
|--|-----------|--|
| Potential acute health effects           |           |  |
| Eye contact                              | :         | Causes serious eye damage.   |
| Inhalation                               | :         | May cause respiratory irritation.  |
| Skin contact                             | :         | Causes severe burns.   |
| Ingestion                                | 1         | May be harmful if swallowed.   |
| Symptoms related to the physical         | sic       | cal, chemical and toxicological characteristics  |
| Eye contact                              | :         | Adverse symptoms may include the following:<br>pain<br>watering<br>redness                           |
| Inhalation                               | -         | Adverse symptoms may include the following:<br>respiratory tract irritation<br>coughing              |
| 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 effect             | <u>ts</u> | as well as chronic effects from short and long-term exposure   |
| Short term exposure                      |           |  |
| Potential immediate effects              | :         | Not available.   |
| Potential delayed effects                | :         | Not available.   |
| Long term exposure                       |           |  |
| Potential immediate<br>effects           | :         | Not available.   |
| Potential delayed effects                | :         | Not available.   |
| Potential chronic health effe            | ect       | <u>s</u>   |
| Not available.                           |           |  |
| General                                  | 1         | No known significant effects or critical hazards.  |
| Carcinogenicity                          | :         | No known significant effects or critical hazards.  |
| Mutagenicity                             | :         | No known significant effects or critical hazards.  |
| Reproductive toxicity                    | ;         | No known significant effects or critical hazards.  |
| Numerical measures of toxici             | ity       |  |

Acute toxicity estimates

## Section 11. Toxicological information

| Product/ingredient name               | Oral (mg/<br>kg) | Dermal<br>(mg/kg) | Inhalation<br>(gases)<br>(ppm) | Inhalation<br>(vapours)<br>(mg/l) | Inhalation<br>(dusts<br>and mists)<br>(mg/l) |
|---------------------------------------|------------------|-------------------|--------------------------------|-----------------------------------|--|
| Jotatemp 210 Comp B (MM-WCS)          | 2780.2<br>N/A    |                   | N/A                            | 37.9                              | N/A  |
| xylene                                | IN/A             | 1100              | N/A                            | 11                                | N/A  |
| butan-1-ol                            | 500              | N/A               | N/A                            | N/A                               | N/A  |
| ethylbenzene                          | N/A              | N/A               | N/A                            | 11                                | N/A  |
| 2,4,6-tris(dimethylaminomethyl)phenol | 1673             | N/A               | N/A                            | N/A                               | N/A  |

## Section 12. Ecological information

#### **Toxicity**

| Product/ingredient name | Result  | Species   | Exposure                                     |
|-------------------------|---|---|--|
| xylene                  | Acute LC50 8500 µg/l Marine water   | Crustaceans - Palaemonetes pugio  | 48 hours                                     |
| ethylbenzene            | Acute LC50 13400 μg/l Fresh water<br>Acute EC50 7700 μg/l Marine water<br>Acute EC50 2.93 mg/l<br>Acute LC50 4.2 mg/l | Fish - Pimephales promelas<br>Algae - Skeletonema costatum<br>Daphnia<br>Fish | 96 hours<br>96 hours<br>48 hours<br>96 hours |

#### Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability   |
|-------------------------|-------------------|------------|--------------------|
| xylene<br>ethylbenzene  | -                 |            | Readily<br>Readily |

#### **Bioaccumulative potential**

| Product/ingredient name     | LogPow | BCF         | Potential |
|-----------------------------|--------|-------------|-----------|
| xylene                      | 3.12   | 8.1 to 25.9 | low       |
| butan-1-ol                  | 1      | -           | low       |
| ethylbenzene                | 3.6    | -           | low       |
| 2,4,6-tris                  | 0.219  | -           | low       |
| (dimethylaminomethyl)phenol |        |             |           |

#### Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

#### Other adverse effects

: No known significant effects or critical hazards.

## Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld

## Section 13. Disposal considerations

or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

|                               | UN  | IMDG   | IATA   |
|-------------------------------|---|--|--|
| UN number                     | UN3469  | UN3469                                       | UN3469                                       |
| UN proper<br>shipping name    | Paint related material,<br>flammable, corrosive | Paint related material, flammable, corrosive | Paint related material, flammable, corrosive |
| Transport hazard<br>class(es) | 3 (8)   | 3 (8)  | 3 (8)  |
| Packing group                 | Ш   |  | Ш  |
| Environmental hazards         | No.   | No.  | No.  |

#### **Additional information**

| ADR / RID | 1 | Hazard identification number 38 |
|-----------|---|---------------------------------|
|           |   | Tunnel code (D/E)               |
| IMDG      | : | Emergency schedules F-E, S-C    |

**Special precautions for user : Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

#### Transport in bulk according : Not available. to IMO instruments

## Section 15. Regulatory information

Harmful Chemicals List : Listed

#### International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

**Montreal Protocol** 

Not listed.

## Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC) Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.

## Section 16. Other information

| <u>History</u>                 |  |
|--------------------------------|--|
| Date of printing               | : 30.01.2025   |
| Date of issue/Date of revision | : 30.01.2025   |
| Date of previous issue         | : 04.07.2024   |
| Version                        | : 1.05   |
| Key to abbreviations           | : 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 = International Air Transport Association<br>IBC = 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>N/A = Not available<br>SGG = Segregation Group<br>UN = United Nations |

#### Procedure used to derive the classification

| FLAMMABLE LIQUIDS - Category 3On basis of test dataACUTE TOXICITY (oral) - Category 5Calculation methodSKIN CORROSION/IRRITATION - Category 1Calculation methodSERIOUS EYE DAMAGE/EYE IRRITATION - Category 1Calculation methodSPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tractCalculation method | Classification  | Justification  |
|--|---|--|
| irritation) - Category 3<br>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3<br>Calculation method  | ACUTE TOXICITY (oral) - Category 5<br>SKIN CORROSION/IRRITATION - Category 1<br>SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1<br>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract<br>irritation) - Category 3 | Calculation method<br>Calculation method<br>Calculation method<br>Calculation method |

References

: Not available.

**V** 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.