# SAFETY DATA SHEET



### Jotamastic Smart Pack Comp A

### Section 1. Identification

| Product identifier               | : Jotamastic Smart Pack Comp A |
|----------------------------------|--------------------------------|
| Product code                     | : 1550                         |
| Other means of<br>identification | : Not available.               |
| Product type                     | : Liquid.                      |
| Product description              | : Paint.                       |

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

| Supplier's details   | : Jotun (Singapore) Pte Ltd<br>37 Tuas View Crescent<br>Singapore 637236<br>Phone: 6508 8288<br>Fax: 6265 7484<br>SDSJotun@jotun.com |  |
|--|--|--|
| Emergency telephone<br>number (with hours of<br>operation) | : Jotun (Singapore) Pte Ltd, Tel: 6508 8288  |  |

# Section 2. Hazards identification

| Classification of the substance or mixture | : FLAMMABLE LIQUIDS - Category 3<br>SKIN CORROSION/IRRITATION - Category 2<br>SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A<br>SKIN SENSITISATION - Category 1<br>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
|--|---|
| GHS label elements, inclu                  | ding precautionary statements   |
| Hazard pictograms                          |   |

| Signal word<br>Hazard statements | <ul> <li>Warning.</li> <li>H226 - Flammable liquid and vapour.<br/>H315 - Causes skin irritation.<br/>H317 - May cause an allergic skin reaction.<br/>H319 - Causes serious eye irritation.<br/>H411 - Toxic to aquatic life with long lasting effects.</li> </ul> |
|----------------------------------|--|
| Precautionary statements         |  |
| General                          | : Not applicable.  |

### Section 2. Hazards identification

| Prevention | <ul> <li>P280 - Wear protective gloves. Wear 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>P391 - Collect spillage.</li> <li>P362 + P364 - Take off contaminated clothing and wash it before reuse.</li> <li>P302 + P352 - IF ON SKIN: Wash with plenty of water.</li> <li>P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.</li> <li>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.</li> <li>Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P337 + P313 - If eye irritation persists: Get medical advice or attention.</li> </ul> |
| Storage    | : P403 + P235 - Store in a well-ventilated place. Keep cool.  |
| 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 | 1 | None known. |
|----------------------------|---|-------------|
| result in classification   |   |             |

### Section 3. Composition/information on ingredients

: Mixture : Not available.

| Substance/mixture |  |
|-------------------|--|
| Other means of    |  |
| identification    |  |

| Ingredient name             | %         | CAS number |
|-----------------------------|-----------|------------|
| epoxy resin (MW ≤ 700)      | ≥25 - ≤50 | 1675-54-3  |
| Phenol, methylstyrenated    | ≤10       | 68512-30-1 |
| xylene                      | ≤10       | 1330-20-7  |
| epoxy resin (MW 700-1200)   | ≤5        | 25036-25-3 |
| hydrocarbons, C9, aromatics | ≤3        | 64742-95-6 |
| ethylbenzene                | ≤3        | 100-41-4   |
| benzyl alcohol              | ≤3        | 100-51-6   |
| butan-1-ol                  | <3        | 71-36-3    |
| propylidynetrimethanol      | ≤0.3      | 77-99-6    |

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.

Chemical formula : Not applicable.

### Section 4. First aid measures

#### Description of necessary first aid measures

- Eye contact
- : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

# Section 4. First aid measures

| Inhalation   | : Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>If not breathing, if breathing is irregular or if respiratory arrest occurs, provide<br>artificial respiration or oxygen by trained personnel. It may be dangerous to the<br>person providing aid to give mouth-to-mouth resuscitation. Get medical attention if<br>adverse health effects persist or are severe. If unconscious, place in recovery<br>position and get medical attention immediately. Maintain an open airway. Loosen<br>tight clothing such as a collar, tie, belt or waistband.   |
|--------------|--|
| Skin contact | : Wash with plenty of soap and 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. Get medical attention. In the<br>event of any complaints or symptoms, avoid further exposure. Wash clothing before<br>reuse. Clean shoes thoroughly before reuse.  |
| Ingestion    | : Wash out mouth with water. Remove dentures if any. If material has been<br>swallowed and the exposed person is conscious, give small quantities of water to<br>drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not<br>induce vomiting unless directed to do so by medical personnel. If vomiting occurs,<br>the head should be kept low so that vomit does not enter the lungs. Get medical<br>attention if adverse health effects persist or are severe. Never give anything by<br>mouth to an unconscious person. If unconscious, place in recovery position and get<br>medical attention immediately. Maintain an open airway. Loosen tight clothing such<br>as a collar, tie, belt or waistband. |

#### Most important symptoms/effects, acute and delayed

| Potential acute health effec | <u>ts</u>  |   |
|------------------------------|------------|---|
| Eye contact                  | 1          | Causes serious eye irritation.  |
| Inhalation                   | 1          | No known significant effects or critical hazards.   |
| Skin contact                 | 1          | Causes skin irritation. May cause an allergic skin reaction.  |
| Ingestion                    | :          | No known significant effects or critical hazards.   |
| Over-exposure signs/symp     | ton        | <u>15</u>   |
| Eye contact                  | :          | Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness  |
| Inhalation                   | 1          | No specific data.   |
| Skin contact                 | :          | Adverse symptoms may include the following:<br>irritation<br>redness  |
| Ingestion                    | ;          | No specific data.   |
| Indication of immediate med  | <u>ica</u> | l attention and special treatment needed, if necessary  |
| Notes to physician           | :          | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.   |
| Specific treatments          | 1          | No specific treatment.  |
| Protection of first-aiders   | :          | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |

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 toxic 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>metal oxide/oxides   |
| Special protective actions for fire-fighters   | : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.   |
| Special protective equipment for fire-fighters | <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>  |

# Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

| - oroonal procession process   |    |  |
|--------------------------------|----|--|
| 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. Avoid breathing 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. Collect spillage.  |
| Methods and material for con   | ta | inment and cleaning up   |
| Small spill                    | :  | Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble.<br>Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.  |
| Large spill                    | :  | Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

# Section 7. Handling and storage

| Precautions for safe handling                                      | I |   |
|--|---|---|
| Protective measures  | : | Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. |
| Advice on general 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. 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          | Workplace Safety and Health Act<br>(Singapore, 2/2006). [Xylene]<br>PEL (short term): 651 mg/m <sup>3</sup> 15 minutes.<br>PEL (short term): 150 ppm 15 minutes.<br>PEL (long term): 434 mg/m <sup>3</sup> 8 hours.<br>PEL (long term): 100 ppm 8 hours.                       |
| ethylbenzene    | Workplace Safety and Health Act<br>(Singapore, 2/2006). Notes:<br>PEL (long term): 100 ppm 8 hours.<br>PEL (long term): 434 mg/m <sup>3</sup> 8 hours.<br>Workplace Safety and Health Act  |
| butan-1-ol      | (Singapore, 2/2006).<br>PEL (short term): 543 mg/m <sup>3</sup> 15 minutes.<br>PEL (short term): 125 ppm 15 minutes.<br>Workplace Safety and Health Act<br>(Singapore, 2/2006).<br>PEL (short term): 152 mg/m <sup>3</sup> 15 minutes.<br>PEL (short term): 50 ppm 15 minutes. |

#### **Biological exposure indices**

No exposure indices known.

# Section 8. Exposure controls/personal protection

| Appropriate engineering controls | Use only with adequate ventilation. Use process enclosures, local exhaust<br>ventilation or other engineering controls to keep worker exposure to airborne<br>contaminants below any recommended or statutory limits. The engineering control<br>also need to keep gas, vapour or dust concentrations below any lower explosive<br>limits. Use explosion-proof ventilation equipment.   |  |
|----------------------------------|---|--|
| Environmental exposure controls  | : 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 meas       | <u>ures</u>   |  |
| Hygiene 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>Contaminated work clothing should not be allowed out of the workplace. Wash<br>contaminated clothing before reusing. Ensure that eyewash stations and safety<br>showers are close to the workstation location.   |  |
| Eye/face protection              | : Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.  |  |
| Skin protection                  |   |  |
| Hand protection                  | <ul> <li>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.</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> </ul> |  |
|                                  | <ul> <li>Wear suitable gloves tested to ISO 374-1:2016.</li> <li>May be used, gloves(breakthrough time) 4 - 8 hours: neoprene (&gt; 0.35 mm), butyl rubber (&gt; 0.4 mm), PVC (&gt; 0.5 mm)</li> <li>Recommended, gloves(breakthrough time) &gt; 8 hours: Viton® (&gt; 0.7 mm), 4H/Silver Shield® (&gt; 0.07 mm), Teflon (&gt; 0.35 mm), polyvinyl alcohol (PVA) (&gt; 0.3 mm), nitrile rubber (&gt; 0.75 mm)</li> <li>For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.</li> </ul>   |  |
|                                  | The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.   |  |
| Body protection                  | : Use chemical-resistant protective suit / disposable overall.  |  |
|                                  | 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 selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.   |  |

### Section 8. Exposure controls/personal protection

#### 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.

# 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  | : Li | Liquid.  |  |  |
| Colour  | : G  | Grey, Red, Yellowish-brown., Black, Green.   |  |  |
| Odour   | : C  | haracteristic. [Strong]  |  |  |
| Odour threshold   | : N  | ot available.  |  |  |
| рН  | : N  | ot applicable.   |  |  |
| Melting point/freezing point                            | : N  | ot applicable.   |  |  |
| Boiling point, initial boiling point, and boiling range |      | owest known value: 119°C (246.2°F) (butan-1-ol). Weighted average: 254.92°C<br>90.9°F)                               |  |  |
| Flash point   | : C  | losed cup: 41°C (105.8°F)  |  |  |
| Evaporation rate  |      | ghest known value: 0.84 (ethylbenzene) Weighted average: 0.62compared with<br>ityl acetate                           |  |  |
| Flammability  | : N  | ot applicable.   |  |  |
| Lower and upper explosion<br>limit/flammability limit   | : G  | Greatest known range: Lower: 1.3% Upper: 13% (benzyl alcohol)  |  |  |
| Vapour pressure   |      | Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.17 kPa (1.28 mm Hg) (at 20°C) |  |  |
| Relative vapour density                                 |      | Highest known value: 11.7 (Air = 1) (epoxy resin (MW $\leq$ 700)). Weighted average: 9.81 (Air = 1)                  |  |  |
| Density   | : 1. | 1.35 to 1.43 g/cm <sup>3</sup>   |  |  |
| Solubility(ies)   | :    |  |  |  |
| Media   |      | Result   |  |  |
| cold water<br>hot water                                 |      | Not soluble<br>Not soluble   |  |  |
| Partition coefficient: n-<br>octanol/water              | : N  | Not available.   |  |  |
| Auto-ignition temperature                               |      | Lowest known value: 280 to 470°C (536 to 878°F) (hydrocarbons, C9, aromatics).                                       |  |  |
| Decomposition temperature                               |      | Not available.   |  |  |
| Viscosity   | : Ki | Kinematic (40°C): >20.5 mm²/s  |  |  |
| Particle characteristics                                |      |  |  |  |
| Median particle size                                    | : N  | ot applicable.   |  |  |

### Section 10. Stability and reactivity

| Reactivity                         | : 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. |
| Date of issue/Date of revision     | : 29.05.2024 Date of previous issue : 28.05.2024 Version : 1.01 7/13  |

# Section 10. Stability and reactivity

|                                     | oxidising agents, strong alkalis, strong acids.   |
|-------------------------------------|---|
| Hazardous decomposition<br>products | : Under normal conditions of storage and use, hazardous decomposition products<br>should not be produced. |
| SADT                                | : Not available.  |

# Section 11. Toxicological information

### Information on toxicological effects

### Acute toxicity

| Product/ingredient name | Result                 | Species    | Dose        | Exposure |
|-------------------------|------------------------|------------|-------------|----------|
| epoxy resin (MW ≤ 700)  | LD50 Dermal            | Rabbit     | 20 g/kg     | -        |
|                         | LD50 Oral              | Mouse      | 15600 mg/kg | -        |
| xylene                  | LC50 Inhalation Vapour | Rat        | 11 mg/l     | 4 hours  |
| -                       | LD50 Oral              | Rat        | 4300 mg/kg  | -        |
|                         | TDLo Dermal            | Rabbit     | 4300 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  | -        |
| benzyl alcohol          | LD50 Oral              | Rat        | 1230 mg/kg  | -        |
| butan-1-ol              | LD50 Oral              | Rat        | 790 mg/kg   | -        |
| propylidynetrimethanol  | LD50 Oral              | Rat        | 14000 mg/kg | -        |

#### Irritation/Corrosion

| Product/ingredient name   | Result                                       | Species                            | Score | Exposure                    | Observation |
|---------------------------|--|------------------------------------|-------|-----------------------------|-------------|
| epoxy resin (MW ≤ 700)    | Eyes - Severe irritant                       | Rabbit                             | -     | 24 hours 2<br>milligrams    | -           |
|                           | Skin - Mild irritant                         | Rabbit                             | -     | 500<br>milligrams           | -           |
| Phenol, methylstyrenated  | Skin - Mild irritant                         | Mammal -<br>species<br>unspecified | -     | -                           | -           |
| xylene                    | Eyes - Mild irritant<br>Skin - Mild irritant | Rabbit<br>Rat                      | -     | 87 milligrams<br>8 hours 60 | -           |
|                           |  |                                    |       | microliters                 |             |
| epoxy resin (MW 700-1200) | Eyes - Mild irritant                         | Mammal -<br>species<br>unspecified | -     | -                           | -           |
|                           | Skin - Mild irritant                         | Mammal -<br>species<br>unspecified | -     | -                           | -           |
| benzyl alcohol            | Eyes - Mild irritant                         | Mammal -<br>species<br>unspecified | -     | -                           | -           |

#### **Sensitisation**

| Product/ingredient name   | Route of exposure | Species                         | Result      |
|---------------------------|-------------------|---------------------------------|-------------|
| epoxy resin (MW ≤ 700)    | skin              | Mammal - species<br>unspecified | Sensitising |
| Phenol, methylstyrenated  | skin              | Mammal - species<br>unspecified | Sensitising |
| epoxy resin (MW 700-1200) | skin              | Mammal - species<br>unspecified | Sensitising |

#### **Mutagenicity**

Not available.

### **Carcinogenicity**

# Section 11. Toxicological information

#### 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    |
| hydrocarbons, C9, aromatics | Category 3 | -                 | Respiratory tract<br>irritation |
|                             | Category 3 |                   | Narcotic effects                |
| butan-1-ol                  | Category 3 | -                 | Respiratory tract<br>irritation |
|                             | Category 3 |                   | Narcotic effects                |

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

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

#### **Aspiration hazard**

| Product/ingredient name     | Result   |
|-----------------------------|--|
| hydrocarbons, C9, aromatics | ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 1 |

| Information on likely routes of exposure | :   | Not available.   |  |  |  |
|--|-----|--|--|--|--|
| Potential acute health effects           | 2   |  |  |  |  |
| Eye contact                              | :   | Causes serious eye irritation.   |  |  |  |
| Inhalation                               | 1   | lo known significant effects or critical hazards.  |  |  |  |
| Skin contact                             | 1   | Causes skin irritation. May cause an allergic skin reaction.                             |  |  |  |
| Ingestion                                | 1   | No known significant effects or critical hazards.  |  |  |  |
| Symptoms related to the phy              | sic | cal, chemical and toxicological characteristics  |  |  |  |
| Eye contact                              | :   | Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness |  |  |  |
| Inhalation                               | :   | No specific data.  |  |  |  |
| Skin contact                             | :   | Adverse symptoms may include the following:<br>irritation<br>redness                     |  |  |  |
| Ingestion                                | 1   | No specific data.  |  |  |  |
| Delayed and immediate effec              | :ts | as well as chronic effects from short and long-term exposure                             |  |  |  |
| <u>Short term exposure</u>               |     |  |  |  |  |
| Potential immediate<br>effects           | 1   | Not available.   |  |  |  |
| Potential delayed effects                | 1   | Not available.   |  |  |  |
| Date of issue/Date of revision           |     | : 29.05.2024 Date of previous issue : 28.05.2024 Version : 1.01                          |  |  |  |

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# Section 11. Toxicological information

| <u>Long term exposure</u>    |   |
|------------------------------|---|
| Potential immediate effects  | : Not available.  |
| Potential delayed effects    | : Not available.  |
| Potential chronic health eff | ects  |
| Not available.               |   |
| General                      | : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels. |
| 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 toxicity

### Acute toxicity estimates

| 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) |
|------------------------------|------------------|-------------------|--------------------------------|-----------------------------------|--|
| Jotamastic Smart Pack Comp A | 21693.9          | 18719.4           | N/A                            | 115.9                             | N/A  |
| xylene                       | 4300             | 1100              | N/A                            | 11                                | N/A  |
| ethylbenzene                 | 3500             | N/A               | N/A                            | 11                                | N/A  |
| benzyl alcohol               | 1230             | N/A               | N/A                            | 11                                | N/A  |
| butan-1-ol                   | 500              | N/A               | N/A                            | N/A                               | N/A  |
| propylidynetrimethanol       | 14000            | N/A               | N/A                            | N/A                               | N/A  |

# Section 12. Ecological information

### **Toxicity**

| Product/ingredient name     | Result                            | Species                             | Exposure |
|-----------------------------|-----------------------------------|-------------------------------------|----------|
| epoxy resin (MW ≤ 700)      | Acute EC50 1.4 mg/l               | Daphnia                             | 48 hours |
|                             | Acute LC50 3.1 mg/l               | Fish - pimephales promelas          | 96 hours |
|                             | Chronic NOEC 0.3 mg/l             | Fish                                | 21 days  |
| xylene                      | Acute LC50 8500 μg/Ι Marine water | Crustaceans - Palaemonetes<br>pugio | 48 hours |
|                             | Acute LC50 13400 µg/l Fresh water | Fish - Pimephales promelas          | 96 hours |
| hydrocarbons, C9, aromatics |                                   | Daphnia                             | 48 hours |
|                             | Acute IC50 <10 mg/l               | Algae                               | 72 hours |
|                             | Acute LC50 <10 mg/l               | Fish                                | 96 hours |
| ethylbenzene                | Acute EC50 7700 µg/l Marine water | Algae - Skeletonema costatum        | 96 hours |
| ,                           | Acute EC50 2.93 mg/l              | Daphnia                             | 48 hours |
|                             | Acute LC50 4.2 mg/l               | Fish                                | 96 hours |

#### Persistence/degradability

| Product/ingredient name     | Aquatic half-life | Photolysis | Biodegradability |
|-----------------------------|-------------------|------------|------------------|
| epoxy resin (MW ≤ 700)      | -                 |            | Not readily      |
| xylene                      | -                 |            | Readily          |
| hydrocarbons, C9, aromatics | -                 |            | Not readily      |
| ethylbenzene                | -                 |            | Readily          |
| benzyl alcohol              | -                 | -          | Readily          |

#### **Bioaccumulative potential**

# Section 12. Ecological information

|                             | -            |             |           |  |
|-----------------------------|--------------|-------------|-----------|--|
| Product/ingredient name     | LogPow       | BCF         | Potential |  |
| epoxy resin (MW ≤ 700)      | 2.64 to 3.78 | 31          | low       |  |
| Phenol, methylstyrenated    | 3.627        | -           | low       |  |
| xylene                      | 3.12         | 8.1 to 25.9 | low       |  |
| hydrocarbons, C9, aromatics | -            | 10 to 2500  | high      |  |
| ethylbenzene                | 3.6          | -           | low       |  |
| benzyl alcohol              | 0.87         | <100        | low       |  |
| butan-1-ol                  | 1            | -           | low       |  |
| propylidynetrimethanol      | -0.47        | <1          | 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. 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 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   | ΙΑΤΑ   | ADR/RID | ADN    |  |
| UN number                         | UN1263   | UN1263   | UN1263   | UN1263  | UN1263 |  |
| UN proper<br>shipping name        | Paint  | Paint. Marine<br>pollutant (epoxy<br>resin (MW ≤ 700)) | Paint  | Paint   | Paint  |  |
| Transport<br>hazard class<br>(es) | 3  |  | 3  |         |        |  |
| Packing group                     | ш  | 111  | ш  |         | 111    |  |
| Environmental<br>hazards          | Yes. The<br>environmentally<br>hazardous<br>substance mark is<br>not required. | Yes.   | Yes. The<br>environmentally<br>hazardous<br>substance mark is<br>not required. | Yes.    | Yes.   |  |

**Additional information** 

Date of issue/Date of revision

### Section 14. Transport information

| •                            |   |   |
|------------------------------|---|---|
| IMDG                         | : | The marine pollutant mark is not required when transported in sizes of $\leq$ 5 L or $\leq$ 5 kg.<br><b>Emergency schedules</b> F-E, <u>S-E</u>   |
| ΙΑΤΑ                         | 1 | The environmentally hazardous substance mark may appear if required by other transportation regulations.  |
| ADR/RID                      | : | The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.<br><u>Hazard identification number</u> 30<br><u>Tunnel code</u> (D/E)                                    |
| ADN                          | : | The environmentally hazardous substance mark is not required when transported in sizes of $\leq 5 \text{ L}$ or $\leq 5 \text{ kg}$ .   |
| 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 : Not available. to IMO instruments

### Section 15. Regulatory information

#### Singapore - hazardous chemicals under government control None.

### 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               | : 29.05.2024  |
| Date of issue/Date of revision | : 29.05.2024  |
| Date of previous issue         | : 28.05.2024  |
| 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 = 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</li> </ul> |

| Date of issue/Date of revision | : 29.05.2024 | Date of previous issue | : 28.05.2024 | Version : 1.01 | 12/13 |
|--------------------------------|--------------|------------------------|--------------|----------------|-------|
|                                |              |                        |              |                |       |

### Section 16. Other information

#### Procedure used to derive the classification

| Classification                                  | Justification         |
|---|-----------------------|
| FLAMMABLE LIQUIDS - Category 3                  | On basis of test data |
| SKIN CORROSION/IRRITATION - Category 2          | Calculation method    |
| SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A | Calculation method    |
| SKIN SENSITISATION - Category 1                 | Calculation method    |
| LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 | 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.