

# Jotun Thinner No. 17

# SECTION 1: Identification of the substance/mixture and of the company/ undertaking

| 1.1 Product identifier           |                        |
|----------------------------------|------------------------|
| Product name                     | : Jotun Thinner No. 17 |
| Product code                     | : 553                  |
| Product description              | : Solvent.             |
| Product type                     | : Liquid.              |
| Other means of<br>identification | : Not available.       |

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

Use in coatings - Consumer use: Apply this product only as specified on the label. Use in coatings - Industrial use Use in coatings - Professional use

### See Annex to the Safety data sheet for additional information in the Exposure Scenario(s).

#### 1.3 Details of the supplier of the safety data sheet

Jotun Paints (Europe) Ltd. Stather Road Flixborough, Scunthorpe North Lincolnshire DN15 8RR England

Tel: +44 17 24 40 00 00 Fax: +44 17 24 40 01 00 SDSJotun@jotun.com

#### 1.4 Emergency telephone number

Contact NHS Direct; phone 0845 4647 or 111. Open 24/7.

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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

### 2.2 Label elements

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Jotun Protects Property

# **SECTION 2: Hazards identification**

| Hazard pictograms   |   |
|---|---|
| Signal word   | : Danger.   |
| Hazard statements   | <ul> <li>H226 - Flammable liquid and vapour.</li> <li>H318 - Causes serious eye damage.</li> <li>H315 - Causes skin irritation.</li> <li>H304 - May be fatal if swallowed and enters airways.</li> <li>H335 - May cause respiratory irritation.</li> <li>H336 - May cause drowsiness or dizziness.</li> <li>H411 - Toxic to aquatic life with long lasting effects.</li> </ul>  |
| Precautionary statements  |   |
| General   | : P102 - Keep out of reach of children.   |
| 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>P271 - Use only outdoors or in a well-ventilated area.</li> <li>P273 - Avoid release to the environment.</li> <li>P261 - Avoid breathing vapour or spray.</li> </ul>   |
| Response  | <ul> <li>P391 - Collect spillage.</li> <li>P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.</li> <li>P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER of physician. Do NOT induce vomiting.</li> <li>P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for severa minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.</li> </ul> |
| Storage   | : P403 - Store in a well-ventilated place.<br>P235 - Keep cool.   |
| Disposal  | : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.  |
| Hazardous ingredients   | <ul> <li>hydrocarbons, C9, aromatics, (&lt;0.1% Benzene)</li> <li>xylene</li> <li>butan-1-ol</li> </ul>   |
| Supplemental label elements   | : Not applicable.   |
| Annex XVII - Restrictions<br>on the manufacture,<br>placing on the market and<br>use of certain dangerous<br>substances, mixtures and<br>articles | : Not applicable.   |
| Special packaging requirem  | ients   |
| Containers to be fitted<br>with child-resistant<br>fastenings   | : Yes, applicable.  |
| Tactile warning of danger   | : Yes, applicable.  |
| 2.3 Other hazards   |   |
| Other hazards which do not result in classification   | : None known.   |

| 3.2 Mixtures : N                                 | /lixture   |           |  |         |  |
|--|--|-----------|--|---------|--|
| Product/ingredient name                          | Identifiers  | Weight %  | Regulation (EC) No.<br>1272/2008 [CLP]   | Туре    |  |
| hydrocarbons, C9, aromatics, (<0.<br>1% Benzene) | REACH #:<br>01-2119455851-35<br>EC: 918-668-5<br>CAS: 64742-95-6                       | ≥50 - ≤75 | Flam. Liq. 3, H226<br>STOT SE 3, H335<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411   | [1]     |  |
| xylene   | REACH #:<br>01-2119488216-32<br>EC: 215-535-7<br>CAS: 1330-20-7<br>Index: 601-022-00-9 | ≥10 - ≤25 | Flam. Liq. 3, H226<br>Acute Tox. 4, H312<br>Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335<br>Asp. Tox. 1, H304                                | [1] [2] |  |
| butan-1-ol                                       | REACH #:<br>01-2119484630-38<br>EC: 200-751-6<br>CAS: 71-36-3<br>Index: 603-004-00-6   | ≥10 - <25 | Flam. Liq. 3, H226<br>Acute Tox. 4, H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>STOT SE 3, H335<br>STOT SE 3, H336  | [1] [2] |  |
| ethylbenzene                                     | REACH #:<br>01-2119489370-35<br>EC: 202-849-4<br>CAS: 100-41-4<br>Index: 601-023-00-4  | <10       | Flam. Liq. 2, H225<br>Acute Tox. 4, H332<br>STOT RE 2, H373 (hearing<br>organs)<br>Asp. Tox. 1, H304<br>See Section 16 for the full<br>text of the H statements<br>declared above. | [1] [2] |  |

# **SECTION 3: Composition/information on ingredients**

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

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

### **SECTION 4: First aid measures**

| 4.1 Description of first aid me | easures   |
|---------------------------------|---|
| General                         | : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice. |
| Eye contact                     | : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.                                 |
| Inhalation                      | : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.      |
| Skin contact                    | : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.  |
| Ingestion                       | : If swallowed, seek medical advice immediately and show the container or label.<br>Keep person warm and at rest. Do NOT induce vomiting.   |

### **SECTION 4: First aid measures**

| Protection of first-aiders | : No action shall be taken involving any personal risk or without suitable training. If it |
|----------------------------|--|
|                            | is suspected that fumes are still present, the rescuer should wear an appropriate          |
|                            | mask or self-contained breathing apparatus. It may be dangerous to the person              |
|                            | providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing             |
|                            | thoroughly with water before removing it, or wear gloves.                                  |

### 4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

### 4.3 Indication of any immediate medical attention and special treatment needed

| Notes to physician  | : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
|---------------------|---|
| Specific treatments | : No specific treatment.  |

See toxicological information (Section 11)

# **SECTION 5: Firefighting measures**

| _  |     | -   |
|--|-----|---|
| 5.1 Extinguishing media                        |     |   |
| Suitable extinguishing media                   | :   | Recommended: alcohol-resistant foam, CO <sub>2</sub> , powders, water spray.  |
| Unsuitable extinguishing media                 | :   | Do not use water jet.   |
| 5.2 Special hazards arising f                  | rom | the substance or mixture  |
| Hazards from the substance or mixture          | :   | Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.                      |
| Hazardous combustion products                  | :   | Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen. |
| 5.3 Advice for firefighters                    |     |   |
| Special protective actions for fire-fighters   | :   | Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.           |
| Special protective equipment for fire-fighters | :   | Appropriate breathing apparatus may be required.  |
|  |     |   |

# **SECTION 6: Accidental release measures**

| 6.1 Personal precautions, protective equipment and emergency procedures |   |   |  |  |
|---|---|---|--|--|
| For non-emergency<br>personnel  | : | Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist.<br>Refer to protective measures listed in sections 7 and 8.   |  |  |
| For emergency responders  | : | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".   |  |  |
| 6.2 Environmental precautions   | : | Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.  |  |  |
| 6.3 Methods and material<br>for containment and<br>cleaning up          | : | 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). Preferably clean with a detergent. Avoid using solvents. |  |  |
| 6.4 Reference to other sections   | : | See Section 1 for emergency contact information.<br>See Section 8 for information on appropriate personal protective equipment.<br>See Section 13 for additional waste treatment information.   |  |  |

# **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

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

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

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

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

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

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8).

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

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

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

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

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

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

#### Notes on joint storage

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

### Additional information on storage conditions

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

### 7.3 Specific end use(s)

Date of issue/Date of revision

5/17

# **SECTION 7: Handling and storage**

Recommendations

Industrial sector specific solutions

: Not available.

cific : Not available.

# **SECTION 8: Exposure controls/personal protection**

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 8.1 Control parameters

### **Occupational exposure limits**

| Product/ingredient name | Exposure limit values                                  |  |  |
|-------------------------|--|--|--|
| xylene                  | EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed |  |  |
|                         | through skin.  |  |  |
|                         | STEL: 441 mg/m <sup>3</sup> 15 minutes.                |  |  |
|                         | STEL: 100 ppm 15 minutes.                              |  |  |
|                         | TWA: 220 mg/m <sup>3</sup> 8 hours.                    |  |  |
|                         | TWA: 50 ppm 8 hours.                                   |  |  |
| butan-1-ol              | EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed |  |  |
|                         | through skin.  |  |  |
|                         | STEL: 154 mg/m <sup>3</sup> 15 minutes.                |  |  |
|                         | STEL: 50 ppm 15 minutes.                               |  |  |
| ethylbenzene            | EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed |  |  |
| 2                       | through skin.  |  |  |
|                         | STEL: 552 mg/m <sup>3</sup> 15 minutes.                |  |  |
|                         | STEL: 125 ppm 15 minutes.                              |  |  |
|                         | TWA: 100 ppm 8 hours.                                  |  |  |
|                         | TWA: 441 mg/m <sup>3</sup> 8 hours.                    |  |  |

**Recommended monitoring procedures** If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### **DNELs/DMELs**

| Product/ingredient name                        | •        | Exposure                 | Value                 | Population       | Effects      |
|--|----------|--------------------------|-----------------------|------------------|--------------|
| hydrocarbons, C9, aromatics, (<0.1<br>Benzene) | %        | Long term Dermal         | 25 mg/kg<br>bw/day    | Workers          | Systemic     |
| ,  |          | Long term<br>Inhalation  | 150 mg/m <sup>3</sup> | Workers          | Systemic     |
|  |          | Long term Dermal         | 11 mg/kg<br>bw/day    | Consumers        | Systemic     |
|  |          | Long term<br>Inhalation  | 32 mg/m <sup>3</sup>  | Consumers        | Systemic     |
|  |          | Long term Oral           | 11 mg/kg<br>bw/day    | Consumers        | Systemic     |
| xylene   |          | Short term<br>Inhalation | 289 mg/m <sup>3</sup> | Workers          | Systemic     |
|  |          | Short term<br>Inhalation | 289 mg/m <sup>3</sup> | Workers          | Local        |
|  |          | Long term Dermal         | 180 mg/kg<br>bw/day   | Workers          | Systemic     |
| te of issue/Date of revision : 17              | .07.2019 | Date of previous issue   | : No prev             | vious validation | lersion :1 6 |

# **SECTION 8: Exposure controls/personal protection**

|              | Long term                | 77 mg/m³               | Workers   | Systemic  |
|--------------|--------------------------|------------------------|-----------|-----------|
|              | Inhalation               |                        |           | e yetenno |
|              | Long term Dermal         | 108 mg/kg<br>bw/day    | Consumers | Systemic  |
|              | Long term<br>Inhalation  | 14.8 mg/m <sup>3</sup> | Consumers | Systemic  |
|              | Long term Oral           | 1.6 mg/kg<br>bw/day    | Consumers | Systemic  |
| butan-1-ol   | Long term<br>Inhalation  | 310 mg/m <sup>3</sup>  | Workers   | Local     |
|              | Long term Oral           | 3.125 mg/<br>kg bw/day | Consumers | Systemic  |
|              | Long term<br>Inhalation  | 55 mg/m <sup>3</sup>   | Consumers | Local     |
| ethylbenzene | Short term<br>Inhalation | 293 mg/m <sup>3</sup>  | Workers   | Local     |
|              | Long term Dermal         | 180 mg/kg<br>bw/day    | Workers   | Systemic  |
|              | Long term<br>Inhalation  | 77 mg/m³               | Workers   | Systemic  |
|              | Long term<br>Inhalation  | 15 mg/m³               | Consumers | Systemic  |
|              | Long term Oral           | 1.6 mg/kg<br>bw/day    | Consumers | Systemic  |
|              |                          | 1                      |           |           |

#### **PNECs**

| Product/ingredient name | Compartment Detail        | Value            | Method Detail |
|-------------------------|---------------------------|------------------|---------------|
| xylene                  | Fresh water               | 0.327 mg/l       | -             |
| •                       | Marine                    | 0.327 mg/l       | -             |
|                         | Sewage Treatment<br>Plant | 6.58 mg/l        | -             |
|                         | Fresh water sediment      | 12.46 mg/kg dwt  | -             |
|                         | Marine water sediment     | 12.46 mg/kg dwt  | -             |
|                         | Soil                      | 2.31 mg/kg dwt   | -             |
| butan-1-ol              | Fresh water               | 0.082 mg/l       | -             |
|                         | Marine                    | 0.0082 mg/l      | -             |
|                         | Sewage Treatment          | 2476 mg/l        | -             |
|                         | Plant                     | Ū                |               |
|                         | Fresh water sediment      | 0.178 mg/kg dwt  | -             |
|                         | Marine water sediment     | 0.0178 mg/kg dwt | -             |
|                         | Soil                      | 0.015 mg/kg dwt  | -             |
| ethylbenzene            | Fresh water               | 0.1 mg/l         | -             |
| •                       | Marine                    | 0.01 mg/l        | -             |
|                         | Sewage Treatment          | 9.6 mg/l         | -             |
|                         | Plant                     | Ū                |               |
|                         | Fresh water sediment      | 13.7 mg/kg dwt   | -             |
|                         | Soil                      | 2.68 mg/kg dwt   | -             |
|                         | Secondary Poisoning       | 20 mg/kg         | -             |

| 8.2 Exposure controls<br>Appropriate engineering<br>controls | : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.  |
|--|---|
| Individual protection meas                                   | <u>ures</u>   |
| Hygiene measures   | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. |
| Date of issue/Date of revision                               | : 17.07.2019 Date of previous issue : No previous validation Version : 1 7/17   |

#### SECTION 8: Exposure controls/personal protection **Eye/face protection** : Use safety eyewear designed to protect against splash of liquids. **Skin protection** Gloves There is no one glove material or combination of materials that will give unlimited 2 resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. Wear suitable gloves tested to EN374. May be used, gloves(breakthrough time) 4 - 8 hours: neoprene, butyl rubber, Viton®, Barricade, CPF 3, Responder, PVC Not recommended, gloves(breakthrough time) < 1 hour: PE Recommended, gloves(breakthrough time) > 8 hours: 4H, Teflon, nitrile rubber, polyvinyl alcohol (PVA) For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. **Body protection** Personnel should wear antistatic clothing made of natural fibres or of hightemperature-resistant synthetic fibres. Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. **Respiratory protection** If workers are exposed to concentrations above the exposure limit, they must use a 2 respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter. **Environmental exposure** : Do not allow to enter drains or watercourses. controls

# **SECTION 9: Physical and chemical properties**

| 9.1 Information on basic physic            | cal and chemical properties  |
|--|--|
| Appearance                                 |  |
| Physical state                             | : Liquid.  |
| Colour                                     | : Clear.   |
| Odour                                      | : Characteristic.  |
| Odour threshold                            | : Not applicable.  |
| рН   | : Not applicable.  |
| Melting point/freezing point               | : Not applicable.  |
| Initial boiling point and<br>boiling range | : Lowest known value: 119°C (246.2°F) (butan-1-ol). Weighted average: 155. 39°C (311.7°F)    |
| Flash point                                | : Closed cup: 25°C   |
| Evaporation rate                           | : Highest known value: 0.84 (ethylbenzene) Weighted average: 0.66compared with butyl acetate |
| Flammability (solid, gas)                  | : Not applicable.  |
| Date of issue/Date of revision             | : 17.07.2019 Date of previous issue : No previous validation Version : 1 8/17                |

### **SECTION 9: Physical and chemical properties**

| Upper/lower flammability or<br>explosive limits | 0.8 - 11.3%  |
|---|--|
| Vapour pressure                                 | Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.95 kPa (7.13 mm Hg) (at 20°C) |
| Vapour density                                  | Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.29 (Air = 1)  |
| Density   | 0.86 g/cm³   |
| Solubility(ies)                                 | Insoluble in the following materials: cold water and hot water.  |
| Partition coefficient: n-octanol/<br>water      | Not available.   |
| Auto-ignition temperature                       | Lowest known value: 280 to 470°C (536 to 878°F) (hydrocarbons, C9, aromatics, (<0.1% Benzene)).                      |
| Decomposition temperature                       | Not available.   |
| Viscosity                                       | Not available.   |
| Explosive properties                            | Not available.   |
| Oxidising properties                            | Not available.   |
|   |  |

#### 9.2 Other information

No additional information.

# SECTION 10: Stability and reactivity

| 10.1 Reactivity                            | : | No specific test data related to reactivity available for this product or its ingredients.                                     |
|--|---|--|
| 10.2 Chemical stability                    | : | Stable under recommended storage and handling conditions (see Section 7).  |
| 10.3 Possibility of<br>hazardous reactions | 1 | Under normal conditions of storage and use, hazardous reactions will not occur.  |
| 10.4 Conditions to avoid                   | : | When exposed to high temperatures may produce hazardous decomposition products.  |
| 10.5 Incompatible materials                | 1 | Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids. |
| 10.6 Hazardous<br>decomposition products   | 1 | Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.        |

# **SECTION 11:** Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

### Acute toxicity

# **SECTION 11: Toxicological information**

|                         | •                                 |               |                         |              |
|-------------------------|-----------------------------------|---------------|-------------------------|--------------|
| Product/ingredient name | Result                            | Species       | Dose                    | Exposure     |
| xylene                  | LC50 Inhalation Vapour            | Rat<br>Rat    | 20 mg/l<br>4300 mg/kg   | 4 hours      |
|                         | TDLo Dermal                       | Rabbit        | 4300 mg/kg              | -            |
| butan-1-ol              | LD50 Oral<br>LC50 Inhalation Gas. | Rat<br>Rabbit | 790 mg/kg               | -<br>4 hours |
| ethylbenzene            | LD50 Dermal                       | Rabbit        | 4000 ppm<br>>5000 mg/kg |              |
|                         | LD50 Oral                         | Rat           | 3500 mg/kg              | -            |

### **Conclusion/Summary** : Not available.

### Acute toxicity estimates

|  | Route                         | ATE value                               |  |
|--|-------------------------------|---|--|
| Oral<br>Dermal<br>Inhalation (vapours) |                               | 3333.3 mg/kg<br>5866.7 mg/kg<br>44 mg/l |  |
| Irritation/Corrosion                   |                               |   |  |
| Conclusion/Summary                     | : Not available.              |   |  |
| Sensitisation                          |                               |   |  |
| Conclusion/Summary                     | : Not available.              |   |  |
| Mutagenicity                           |                               |   |  |
| Conclusion/Summary                     | : Not available.              |   |  |
| <b>Carcinogenicity</b>                 |                               |   |  |
| Conclusion/Summary                     | : Not available.              |   |  |
| Reproductive toxicity                  |                               |   |  |
| Conclusion/Summary                     | : Not available.              |   |  |
| Teratogenicity                         |                               |   |  |
| Conclusion/Summary                     | : Not available.              |   |  |
| Specific target organ toxi             | <u>city (single exposure)</u> |   |  |

| Product/ingredient name                      | Category   | Route of exposure | Target organs   |
|--|------------|-------------------|---|
| hydrocarbons, C9, aromatics, (<0.1% Benzene) | Category 3 | Not applicable.   | Respiratory tract<br>irritation and<br>Narcotic effects |
| xylene                                       | Category 3 | Not applicable.   | Respiratory tract<br>irritation                         |
| butan-1-ol                                   | Category 3 | Not applicable.   | Respiratory tract<br>irritation and<br>Narcotic effects |

### Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category   | Route of exposure | Target organs  |
|-------------------------|------------|-------------------|----------------|
| ethylbenzene            | Category 2 | Not determined    | hearing organs |

#### **Aspiration hazard**

| Product/ingredient name                      | Result                         |
|--|--------------------------------|
| Jotun Thinner No. 17 (DC-WCSE)               | ASPIRATION HAZARD - Category 1 |
| hydrocarbons, C9, aromatics, (<0.1% Benzene) | ASPIRATION HAZARD - Category 1 |
| xylene                                       | ASPIRATION HAZARD - Category 1 |
| ethylbenzene                                 | ASPIRATION HAZARD - Category 1 |

### **Other information**

: Not available.

# **SECTION 12: Ecological information**

### 12.1 Toxicity

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

| Product/ingredient name                         | Result               | Species | Exposure |
|---|----------------------|---------|----------|
| hydrocarbons, C9,<br>aromatics, (<0.1% Benzene) | Acute EC50 <10 mg/l  | Daphnia | 48 hours |
| ,   | Acute IC50 <10 mg/l  | Algae   | 72 hours |
|   | Acute LC50 <10 mg/l  | Fish    | 96 hours |
| ethylbenzene                                    | Acute EC50 7.2 mg/l  | Algae   | 48 hours |
| ,   | Acute EC50 2.93 mg/l | Daphnia | 48 hours |
|   | Acute LC50 4.2 mg/l  | Fish    | 96 hours |

Conclusion/Summary

: Water polluting material. May be harmful to the environment if released in large quantities. This material is toxic to aquatic life with long lasting effects.

### 12.2 Persistence and degradability

Conclusion/Summary : Not available.

| Product/ingredient name                         | Aquatic half-life | Photolysis | Biodegradability   |
|---|-------------------|------------|--------------------|
| hydrocarbons, C9,<br>aromatics, (<0.1% Benzene) | -                 | -          | Not readily        |
| xylene<br>ethylbenzene                          | -                 |            | Readily<br>Readily |

### 12.3 Bioaccumulative potential

| Product/ingredient name                         | LogPow | BCF         | Potential |
|---|--------|-------------|-----------|
| hydrocarbons, C9,<br>aromatics, (<0.1% Benzene) | -      | 10 to 2500  | high      |
| xylene  | 3.12   | 8.1 to 25.9 | low       |
| butan-1-ol                                      | 1      | -           | low       |
| ethylbenzene                                    | 3.6    | -           | low       |

| 12.4 Mobility in soil                                  |                  |  |
|--|------------------|--|
| Soil/water partition<br>coefficient (K <sub>oc</sub> ) | : Not available. |  |
| Mobility   | : Not available. |  |
| 12.5 Posults of PRT and vPvR assossment                |                  |  |

| PBT  | : Not applicable. |
|------|-------------------|
| vPvB | : Not applicable. |

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

# SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

**Product** 

# **SECTION 13: Disposal considerations**

| decident lo: Biopo                |  |  |
|-----------------------------------|--|--|
| Methods of disposal               | : The generation of waste should be avoided or minimised wherever possible.<br>Disposal of this product, solutions and any by-products should at all times comply<br>with the requirements of environmental protection and waste disposal legislation<br>and any regional local authority requirements. Dispose of surplus and non-<br>recyclable products via a licensed waste disposal contractor. Waste should not be<br>disposed of untreated to the sewer unless fully compliant with the requirements of<br>all authorities with jurisdiction. |  |
| Hazardous waste                   | : Yes.   |  |
| Disposal considerations           | <ul> <li>Do not allow to enter drains or watercourses.</li> <li>Dispose of according to all federal, state and local applicable regulations.</li> <li>If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.</li> <li>For further information, contact your local waste authority.</li> </ul>  |  |
| European waste<br>catalogue (EWC) | : 08 01 11* Waste paint and varnish containing organic solvents or other dangerous<br>substances   |  |
| Packaging                         |  |  |
| Methods of disposal               | : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.   |  |
| Disposal considerations           | : Using information provided in this safety data sheet, advice should be obtained from<br>the relevant waste authority on the classification of empty containers.<br>Empty containers must be scrapped or reconditioned.<br>Dispose of containers contaminated by the product in accordance with local or<br>national legal provisions.  |  |
| Type of packaging                 | European waste catalogue (EWC)   |  |
| CEPE Paint Guidelines             | 15 01 10* packaging containing residues of or contaminated by hazardous substances   |  |
| Special precautions               | : 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.          |  |

|                                    | ADR/RID                | ADN                    | IMDG  | IATA  |
|------------------------------------|------------------------|------------------------|---|---|
| 14.1 UN number                     | UN1263                 | UN1263                 | UN1263  | UN1263  |
| 14.2 UN proper<br>shipping name    | Paint related material | Paint related material | Paint related material.<br>Marine pollutant<br>(hydrocarbons, C9,<br>aromatics, (<0.1%<br>Benzene)) | Paint related materia   |
| 14.3 Transport<br>hazard class(es) | 3                      |                        |   | 3   |
| 14.4 Packing<br>group              |                        | 111                    | 111   | 111   |
| 14.5<br>Environmental<br>hazards   | Yes.                   | Yes.                   | Yes.  | Yes. The<br>environmentally<br>hazardous substance<br>mark is not required. |

Date of issue/Date of revision

: 17.07.2019 Date of previous issue

Version :1 : No previous validation

# **SECTION 14: Transport information**

| •   |   |   |
|---|---|---|
| Additional information  |   |   |
| ADR/RID   | 1 | Tunnel restriction code: (D/E)<br>Hazard identification number: 30  |
| ADN   | 1 | The environmentally hazardous substance mark is not required when transported in sizes of $\leq 5 \text{ L}$ or $\leq 5 \text{ kg}$ .   |
| 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  | - | The environmentally hazardous substance mark may appear if required by other transportation regulations.  |
| 14.6 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. |
| 14.7 Transport in bulk<br>according to Annex II of<br>Marpol and the IBC Code | : | Not applicable.   |

# **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorisation

None of the components are listed.

Substances of very high concern

None of the components are listed.

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

dangerous substances, mixtures and articles

### Other EU regulations

| voc                              | : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information. |
|----------------------------------|--|
| VOC for Ready-for-Use<br>Mixture | : Not applicable.  |
| Europe inventory                 | : At least one component is not listed.  |

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

### **Seveso Directive**

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

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

Not listed.

Stockholm Convention on Persistent Organic Pollutants

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# **SECTION 15: Regulatory information**

Not listed.

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

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

Not listed.

| 15.2 Chemical safety | : Not applicable. |
|----------------------|-------------------|
|                      |                   |

assessment

# **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

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

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

| Classification          | Justification         |  |
|-------------------------|-----------------------|--|
| Flam. Liq. 3, H226      | On basis of test data |  |
| Skin Irrit. 2, H315     | Calculation method    |  |
| Eye Dam. 1, H318        | Calculation method    |  |
| STOT SE 3, H335         | Calculation method    |  |
| STOT SE 3, H336         | Calculation method    |  |
| Asp. Tox. 1, H304       | Expert judgment       |  |
| Aquatic Chronic 2, H411 | Calculation method    |  |

Full text of abbreviated H statements

| Tun text of abbreviated if statements  |  |
|--|--|
| H225                                   | Highly flammable liquid and vapour.                      |
| H226                                   | Flammable liquid and vapour.                             |
| H302                                   | Harmful if swallowed.                                    |
| H304                                   | May be fatal if swallowed and enters airways.            |
| H312                                   | Harmful in contact with skin.                            |
| H315                                   | Causes skin irritation.                                  |
| H318                                   | Causes serious eye damage.                               |
| H319                                   | Causes serious eye irritation.                           |
| H332                                   | Harmful if inhaled.                                      |
| H335                                   | May cause respiratory irritation.                        |
| H336                                   | May cause drowsiness or dizziness.                       |
| H373                                   | May cause damage to organs through prolonged or repeated |
|  | exposure.  |
| H411                                   | Toxic to aquatic life with long lasting effects.         |
| Full text of classifications [CLP/GHS] |  |
| Acute Tox. 4, H302                     | ACUTE TOXICITY (oral) - Category 4                       |
| Acute Tox. 4, H312                     | ACUTE TOXICITY (dermal) - Category 4                     |
| Acute Tox. 4, H332                     | ACUTE TOXICITY (inhalation) - Category 4                 |
| Aquatic Chronic 2, H411                | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2          |
| Asp. Tox. 1, H304                      | ASPIRATION HAZARD - Category 1                           |
| Eye Dam. 1, H318                       | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1           |
| Eye Irrit. 2, H319                     | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2           |
| Flam. Liq. 2, H225                     | FLAMMABLE LIQUIDS - Category 2                           |
| Flam. Liq. 3, H226                     | FLAMMABLE LIQUIDS - Category 3                           |
|  | 5 7  |

Date of issue/Date of revision

14/17

| SECTION 16: Othe                       | r information    |  |
|--|------------------|--|
| Skin Irrit. 2, H315<br>STOT RE 2, H373 |                  | SKIN CORROSION/IRRITATION - Category 2<br>SPECIFIC TARGET ORGAN TOXICITY - REPEATED<br>EXPOSURE - Category 2 |
| STOT SE 3, H335                        |                  | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE<br>(Respiratory tract irritation) - Category 3              |
| STOT SE 3, H336                        |                  | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE<br>(Narcotic effects) - Category 3                          |
| Date of printing                       | : 17.07.2019     |  |
| Date of issue/ Date of revision        | : 17.07.2019     |  |
| Date of previous issue                 | : No previous va | alidation  |
| Version                                | : 1              |  |
|  |                  |  |

### 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.



# Jotun Thinner No. 17

| Exposure Scenario: Use in           | coatings -       | Industrial use |  |
|-------------------------------------|------------------|----------------|--|
| Sector of Use                       | : Industrial use |                |  |
| Process Category                    | : PROC05 PROC08  | la             |  |
| Environmental release category(ies) | : ERC4           |                |  |

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.

# Operational conditions and risk management measures

#### Control of worker exposure

| Frequency and duration of use   | : Covers daily exposures up to 8 hours  |  |
|---|---|--|
| General - Operational conditions  | : Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes<br>a good basic standard of occupational hygiene is implemented   |  |
| General - Risk management measures  | : Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.<br>Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. See Section 8<br>for information on appropriate personal protective equipment. |  |
| Type of activity or process   | Risk management measures  |  |
| Preparation of material for application                                     | : Provide a good standard of controlled ventilation (10 to 15 air changes per hour).  |  |
| Equipment cleaning and maintenance  | : Drain down system prior to equipment break-in or maintenance.   |  |
| Control of environmental exp  | osure   |  |
| Organisational measures to prevent/limit release from site                  | : Prevent environmental discharge consistent with regulatory requirements.  |  |
| Conditions and measures related to external treatment of waste for disposal | : External treatment and disposal of waste should comply with applicable local and/or national<br>regulations. See Section 13 for additional waste treatment information.   |  |
|   | : External recovery and recycling of waste should comply with applicable local and/or national regulations.   |  |

The exposure scenario for the mixture is based on the following substances:

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# Jotun Thinner No. 17

| Exposure Scenario: Use in           | coatings - F       | Professional use |
|-------------------------------------|--------------------|------------------|
| Sector of Use                       | : Professional use |                  |
| Process Category                    | : PROC05 PROC08a   |                  |
| Environmental release category(ies) | : ERC8a ERC8d      |                  |

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.

### **Operational conditions and risk management measures**

#### Control of worker exposure

| Frequency and duration of use                        | : Covers daily exposures up to 8 hours   |
|--|--|
| General - Operational conditions                     | : Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes<br>a good basic standard of occupational hygiene is implemented  |
| General - Risk management measures                   | : Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.<br>Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. See Section 8<br>for information on appropriate personal protective equipment.  |
| Type of activity or process                          | Risk management measures   |
| Preparation of material for application -<br>Indoor  | <ul> <li>Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Avoid carrying out activities involving exposure for more than 1 hour.</li> <li>or</li> <li>Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear a respirator conforming to EN140 with type A/P2 filter or better.</li> </ul> |
| Preparation of material for application -<br>Outdoor | : Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more<br>than 1 hour.<br>or<br>Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with type A/P2<br>filter or better.   |
| Equipment cleaning and maintenance                   | : Drain down system prior to equipment break-in or maintenance. Avoid carrying out activities involving exposure for more than 4 hours.  |

### Control of environmental exposure

| Organisational measures to prevent/limit release from site                  | : Prevent environmental discharge consistent with regulatory requirements.  |
|---|---|
| Conditions and measures related to external treatment of waste for disposal | : External treatment and disposal of waste should comply with applicable local and/or national<br>regulations. See Section 13 for additional waste treatment information. |
| Conditions and measures related to external recovery of waste               | : External recovery and recycling of waste should comply with applicable local and/or national regulations.   |

### Additional information

The exposure scenario for the mixture is based on the following substances:

REACH #: 01-2119488216-32