

Jotun Protects Property

SAF<mark>ETY D</mark>ATA SHEET

Steelmaster 120SB

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

| 1.1 Product identifier | |
|-------------------------------|--|
| Product name | : Steelmaster 120SB |
| Product code | : 15400 |
| Product description | This is a one component solvent based acrylic thin film intumescent coating. Independently approved for fire protection of structural steel exposed to cellulosic fire. Can be used as mid coat or finish coat in atmospheric environments. Suitable on approved primers on carbon steel and galvanised steel substrates. |
| Product type | : Liquid. |
| Other means of identification | : Not available. |

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

Identified uses

Uses in Coatings - Industrial use Uses in Coatings - Professional use

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 National Poison Centre via Hospital or Registered Medical Practitioner

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

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

| Classification | : R10 Xn; R20/21 Xi; R38 |
|------------------------------|--|
| Physical/chemical hazards | : Flammable. |
| Human health hazards | : Harmful by inhalation and in contact with skin. Irritating to skin. |
| | of the R phrases or H statements declared above. ed information on health effects and symptoms. |

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SECTION 2: Hazards identification

| 2.2 Label elements Hazard pictograms | : | |
|---|---|---|
| Signal word | : | Warning. |
| Hazard statements | : | Flammable liquid and vapour. Causes skin irritation. |
| Precautionary statements | | |
| General | : | Keep out of reach of children. |
| Prevention | ; | Wear protective gloves. Keep away from heat, sparks, open flames and hot surfaces No smoking. Wash hands thoroughly after handling. |
| Response | : | IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. |
| Storage | : | Keep cool. |
| Disposal | : | Sispose of contents and container in accordance with all local, regional, national and international regulations. |
| Hazardous ingredients | : | xylene |
| Supplemental label elements | : | Not applicable. |
| Additional information | : | Not applicable. |
| 2.3 Other hazards | | |
| Other hazards which do not result in classification | - | None known. |

SECTION 3: Composition/information on ingredients

| Substance/mixture | : Mixture | | | | | |
|---|--|--------------|--|---|---------|-------|
| | | | <u>Classi</u> | fication | | |
| Product/ingredient name | Identifiers | % | 67/548/EEC | Regulation (EC) No. 1272/2008 [CLP] | Туре | Notes |
| vylene | REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9 | >=20, <25 | R10 Xn; R20/21 Xi; R38 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 | [1] [2] | С |
| ethylbenzene | REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4 | >=3, <7 | F; R11 Xn; R20 | Flam. Liq. 2, H225 Acute Tox. 4, H332 Asp. Tox. 1, H304 | [1] [2] | - |
| 1,3,5-Triazine-2,4, 6-triamine, polymer with formaldehyde, butylated | CAS: 68002-25-5 | <25 | R53 | Aquatic Chronic 4, H413 | [1] | - |
| | | | See Section 16 for the full text of the R-phrases declared above. | See Section 16 for the full text of the H statements declared above. | | |

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 or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

Steelmaster 120SB

SECTION 3: Composition/information on ingredients

[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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

| General | : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice. |
|----------------------------|--|
| Inhalation | : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. |
| Skin contact | Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners. |
| Eye contact | Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention. |
| Ingestion | : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting. |
| Protection of first-aiders | : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |

4.2 Most important symptoms and effects, both acute and delayed

| Potential acute health effect | | |
|-------------------------------|---|-----------|
| Eye contact | uses serious eye irritation. | |
| Inhalation | posure to decomposition products may cause a health hazard. Serious by be delayed following exposure. | s effects |
| Skin contact | uses skin irritation. | |
| Ingestion | tating to mouth, throat and stomach. | |
| Over-exposure signs/symp | | |
| Eye contact | dverse symptoms may include the following: in or irritation atering dness | |
| Inhalation | o specific data. | |
| Skin contact | lverse symptoms may include the following: itation dness | |
| Ingestion | o specific data. | |
| 4.3 Indication of any immedi | dical attention and special treatment needed | |
| Notes to physician | case of inhalation of decomposition products in a fire, symptoms may b e exposed person may need to be kept under medical surveillance for 4 | |

| | | The exposed person may need to be kept under medical surveillance for 48 hours |
|---------------------|---|--|
| Specific treatments | : | No specific treatment. |

SECTION 5: Firefighting measures

| 5.1 Extinguishing media Suitable extinguishing media | : Recommended: alcohol-resistant foam, CO ₂ , powders, water spray. |
|--|--|
| Unsuitable extinguishing media | : Do not use water jet. |

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SECTION 5: Firefighting measures

| 5.2 Special hazards arising fr | om the substance or mixture |
|---|---|
| Hazards from the substance or mixture | : Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. |
| Hazardous thermal decomposition products | : Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides carbonyl halides metal oxide/oxides |
| 5.3 Advice for firefighters | |
| Special protective actions for fire-fighters | : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. |
| Special protective equipment for fire-fighters | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. |

SECTION 6: Accidental release measures

| 6.1 Personal precautions, protective equipment and emergency procedures | | | | | | | |
|---|-----|--|--|--|--|--|--|
| For non-emergency personnel | : | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. | | | | | |
| For emergency responders | : | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". | | | | | |
| 6.2 Environmental precautions | : | Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). | | | | | |
| 6.3 Methods and materials for | r c | ontainment 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. 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. | | | | | |
| 6.4 Reference to other sections | : | See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information. | | | | | |

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SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

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

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

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

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

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

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel.

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

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

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

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

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

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

Additional information on storage conditions

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

| 7.3 Specific end use(s) | |
|----------------------------|------------------|
| Recommendations | : Not available. |
| Industrial sector specific | : Not available. |
| solutions | |

SECTION 8: Exposure controls/personal protection

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).

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values | | |
|-------------------------|---|--|--|
| xylene ethylbenzene | EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 441 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m³ 8 hours. TWA: 50 ppm 8 hours. EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 552 mg/m³ 15 minutes. | | |
| | STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 441 mg/m ³ 8 hours. | | |

SECTION 8: Exposure controls/personal protection

| 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. |
|--------------------------------------|--|
|--------------------------------------|--|

Derived no effect levels

| Product/ingredient name | Туре | Exposure | Value | Population | Effects |
|-------------------------|------|--------------------------|-----------------------|------------|----------|
| xylene | DNEL | Short term Inhalation | 289 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 289 mg/m³ | Workers | Local |
| | DNEL | Long term Dermal | 180 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 77 mg/m³ | Workers | Systemic |
| | DNEL | Long term Dermal | 108 mg/kg bw/day | Consumers | Systemic |
| | DNEL | Long term Inhalation | 14,8 mg/m³ | Consumers | Systemic |
| | DNEL | Long term Oral | 1,6 mg/kg bw/day | Consumers | Systemic |
| ethylbenzene | DNEL | Short term Inhalation | 293 mg/m ³ | Workers | Local |
| | DNEL | Long term Dermal | 180 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 77 mg/m³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 15 mg/m³ | Consumers | Systemic |
| | DNEL | Long term Oral | 1,6 mg/kg bw/day | Consumers | Systemic |

Predicted no effect concentrations

| Product/ingredient name | Туре | Compartment Detail | Value | Method Detail |
|-------------------------|------|---------------------------|-----------------|---------------|
| xylene | PNEC | Fresh water | 0,327 mg/l | - |
| | PNEC | Marine | 0,327 mg/l | - |
| | PNEC | Sewage Treatment Plant | 6,58 mg/l | - |
| | PNEC | Fresh water sediment | 12,46 mg/kg dwt | - |
| | PNEC | Marine water sediment | 12,46 mg/kg dwt | - |
| | PNEC | Soil | 2,31 mg/kg dwt | - |
| ethylbenzene | PNEC | Fresh water | 0,1 mg/l | - |
| | PNEC | Marine | 0,01 mg/l | - |
| | PNEC | Sewage Treatment Plant | 9,6 mg/l | - |
| | PNEC | Fresh water sediment | 13,7 mg/kg dwt | - |
| | PNEC | Soil | 2,68 mg/kg dwt | - |
| | PNEC | Secondary Poisoning | 20 mg/kg | - |

8.2 Exposure controls

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

controls

SECTION 8: Exposure controls/personal protection

| Individual protection measu | ires | |
|---------------------------------|------|--|
| Hygiene measures | : | Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. |
| Eye/face protection | : | Safety eyewear complying with an approved standard 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 | : | There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. Not recommended, gloves(breakthrough time) < 1 hour: neoprene, butyl rubber, PVC Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber, 4H, Teflon, 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 | : | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. |
| 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 appropriate, certified respirators. Use respiratory mask with charcoal and dust filter when spraying this product.(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter. |
| Environmental exposure controls | : | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |

SECTION 9: Physical and chemical properties

| , , | | • • |
|---|-----|--|
| 9.1 Information on basic physical | l a | nd chemical properties |
| Appearance | | |
| Physical state | : | Liquid. |
| Colour | : | Various colours. |
| Odour | : | Characteristic. |
| Odour threshold | 1 | Not available. |
| рН | : | Not available. |
| Melting point/freezing point | : | Not available. |
| Initial boiling point and boiling range | : | Not available. |
| Flash point | : | Closed cup: 24°C |
| Evaporation rate | : | Not available. |
| Flammability (solid, gas) | 1 | Not available. |
| Burning time | 1 | Not applicable. |
| Burning rate | 1 | Not applicable. |
| Upper/lower flammability or explosive limits | : | 1.1 - 7% |
| Vapour pressure | : | Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.79 kPa (5.93 mm Hg) (at 20°C) |
| Vapour density | 1 | Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.7 (Air = 1) |
| Relative density | 1 | 1.35 g/cm³ |
| Solubility(ies) | : | Insoluble in the following materials: cold water and hot water. |
| Partition coefficient: n-octanol/ water | : | Not available. |
| Auto-ignition temperature | 1 | Not available. |
| Decomposition temperature | 1 | Not available. |
| Viscosity | 1 | Not applicable. |
| Explosive properties | : | Not available. |
| Oxidising properties | : | Not available. |
| | | |

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

| lo specific test data related to reactivity available for this product or its ing | gredients. |
|---|---|
| he product is stable. | |
| Inder normal conditions of storage and use, hazardous reactions will not | occur. |
| | |
| | |
| | oducts |
| : T : U : A b : R o : U | No specific test data related to reactivity available for this product or its ing The product is stable. Under normal conditions of storage and use, hazardous reactions will not Avoid all possible sources of ignition (spark or flame). Do not pressurise, braze, solder, drill, grind or expose containers to heat or sources of ignitio Reactive or incompatible with the following materials: oxidizing materials Under normal conditions of storage and use, hazardous decomposition pr should not be produced. |

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 Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 2 and 15 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. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. 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. Swallowing may cause nausea, diarrhoea, vomiting, gastro-intestinal irritation and chemical pneumonia.

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|----------------------|---------|-------------|----------|
| xylene | LC50 Inhalation Gas. | Rat | 6700 ppm | 4 hours |
| | LD50 Oral | Rat | 4300 mg/kg | - |
| ethylbenzene | LC50 Inhalation Gas. | Rabbit | 4000 ppm | 4 hours |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | 3500 mg/kg | - |

Acute toxicity estimates

| Route | ATE value |
|----------------------|--------------|
| Dermal | 5052,3 mg/kg |
| Inhalation (vapours) | 41,93 mg/l |

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

| Product/ingredient name | Result |
|-------------------------|--------------------------------|
| ethylbenzene | ASPIRATION HAZARD - Category 1 |

SECTION 12: Ecological information

12.1 Toxicity

| Result | Species | Exposure |
|--|---|---|
| Acute EC50 7,2 mg/l Acute EC50 2,93 mg/l Acute LC50 4,2 mg/l | Algae Daphnia Fish | 48 hours 48 hours 96 hours |
| | Acute EC50 7,2 mg/l Acute EC50 2,93 mg/l | Acute EC50 7,2 mg/lAlgaeAcute EC50 2,93 mg/lDaphnia |

Conclusion/Summary

: No known significant effects or critical hazards.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

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

12.3 Bioaccumulative potential

| Product/ingredient name | LogPow | BCF | Potential |
|-------------------------|--------|-------------|-----------|
| xylene | 3,12 | 8.1 to 25.9 | low |
| ethylbenzene | 3,15 | - | low |

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SECTION 12: Ecological information

| 12.4 Mobility in soil | |
|--|------------------|
| Soil/water partition coefficient (K _{oc}) | : Not available. |
| Mobility | : Not available. |
| 12.5 Results of PBT and | vPvB assessment |
| | |

| 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

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

European waste catalogue (EWC)

: 08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information, contact your local waste authority.

SECTION 14: Transport information

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

Transport in accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.

International transport regulations

| 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | : Not available. |
|--|---|
| | F-E, <u>S-E</u> IMDG: Viscous substance. Transport in accordance with paragraph 2.3.2.5 (applicable to receptacles < 30 litre capacity). |
| IMDG | ADR/RID: Viscous substance. Not restricted, ref. chapter 2.2.3.1.5 (applicable to receptacles < 450 litre capacity). Emergency schedules (EmS) |
| Additional information ADR / RID | : Tunnel restriction code: (D/E) |
| 14.6 Special precautions for user | : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. |
| 14.4 Packing group 14.5 Environmental hazards | : No. |
| 14.4 Pooking group | |
| 14.3 Transport hazard class(es) | : 3 |
| 14.2 UN proper shipping name | : Paint |
| 14.1 UN number | : 1263 |

| Date of issue | : 24.07.2014. |
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SECTION 14: Transport information

SECTION 15: Regulatory information

| | | - | | |
|---|-----|--|--|--|
| 15.1 Safety, health and enviro | oni | nental regulations/legislation specific for the substance or mixture | | |
| EU Regulation (EC) No. 1907/2006 (REACH) | | | | |
| Annex XIV - List of substances subject to authorisation | | | | |
| Substances of very high concern | | | | |
| None of the components a | are | listed. | | |
| Annex XVII - Restrictions on the manufacture, | : | Not applicable. | | |
| placing on the market and use of certain | | | | |
| dangerous substances, mixtures and articles | | | | |
| Other EU regulations | | | | |
| Europe inventory | : | Not determined. | | |
| Black List Chemicals | 1 | Not listed | | |
| Priority List Chemicals | 1 | Not listed | | |
| Integrated pollution prevention and control list (IPPC) - Air | : | Not listed | | |
| Integrated pollution prevention and control list (IPPC) - Water | : | Not listed | | |
| Chemical Weapons Convention List Schedule I Chemicals | : | Not listed | | |
| Chemical Weapons Convention List Schedule II Chemicals | : | Not listed | | |
| Chemical Weapons Convention List Schedule III Chemicals | : | Not listed | | |
| 15.2 Chemical Safety Assessment | : | This product contains substances for which Chemical Safety Assessments are still required. | | |

SECTION 16: Other information

| Indicates information the second s | hat has changed from previously issued version. |
|---|--|
| Abbreviations and acronyms | ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration |
| | RRN = REACH Registration Number |

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

| Classification | Justification |
|----------------|---|
| | On basis of test data Calculation method |

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

Steelmaster 120SB

SECTION 16: Other information

| Full text of abbreviated H statements | H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H332 Harmful if inhaled. H413 May cause long lasting harmful effects to aquatic life. | |
|---|--|--|
| Full text of classifications [CLP/GHS] | Keute Tox. 4, H312ACUTE TOXICITY: SKIN - Category 4Acute Tox. 4, H332ACUTE TOXICITY: INHALATION - Category 4Aquatic Chronic 4, H413LONG-TERM AQUATIC HAZARD - Category 4Asp. Tox. 1, H304ASPIRATION HAZARD - Category 1Flam. Liq. 2, H225FLAMMABLE LIQUIDS - Category 2Flam. Liq. 3, H226FLAMMABLE LIQUIDS - Category 3Skin Irrit. 2, H315SKIN CORROSION/IRRITATION - Category 2 | |
| Full text of abbreviated R phrases | R11- Highly flammable. R10- Flammable. R20- Harmful by inhalation. R20/21- Harmful by inhalation and in contact with skin. R38- Irritating to skin. R53- May cause long-term adverse effects in the aquatic environment. | |
| Full text of classifications [DSD/DPD] | : F - Highly flammable Xn - Harmful Xi - Irritant | |
| Date of printing | : 24.07.2014. | |
| Date of issue/ Date of revision | : 24.07.2014. | |
| Date of previous issue | : 07.04.2014. | |
| Version | : 3.01 | |
| Notice to reader | | |

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.



Exposure Scenario: Uses in Coatings - Industrial use

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Annex

| Sector of Use | : Industrial use |
|-------------------------------------|--------------------------------|
| Process Category | : PROC05 PROC07 PROC08a PROC10 |
| 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

| : Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene is implemented. |
|---|
| : Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. See Section 8 for information on appropriate personal protective equipment. |
| Risk Management Measures |
| : Provide a good standard of controlled ventilation (10 to 15 air changes per hour). |
| : Provide extract ventilation to points where emissions occur. |
| : Carry out in a vented booth provided with laminar airflow. or |
| Provide a good standard of controlled ventilation (10 to 15 air changes per hour). and Wear a respirator conforming to EN140 with Type A/P2 filter or better. |
| Dosure |
| : Prevent environmental discharge consistent with regulatory requirements. |
| : External treatment and disposal of waste should comply with applicable local and/or national 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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Exposure Scenario: Uses in Coatings - Professional use

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Annex

| Sector of Use | : Professional use |
|-------------------------------------|--------------------------------|
| Process Category | : PROC05 PROC08a PROC10 PROC11 |
| 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 (unless stated differently). |
|---|--|
| General - Operational conditions | : Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes 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. Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. See Section 8 for information on appropriate personal protective equipment. |
| Type of activity or process | Risk Management Measures |
| Preparation of material for application - Indoor. | : 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. |
| | 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. |
| Preparation of material for application - Outdoor. | : Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour. |
| | Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with Type A/P2 filter or better. |
| Roller, spreader, flow application - Indoor. | : 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. |
| Roller, spreader, flow application - Outdoor. | : Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with Type A/P2 filter or better. |
| Spraying - Manual - Indoor. | : Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Wear a respirator conforming to EN140 with Type A/P2 filter or better. |
| Spraying - Manual - Outdoor. | : Ensure operation is undertaken outdoors. Wear a full-face respirator conforming to EN136 with Type A/P2 filter or better. 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 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:

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