

SAFETY DATA SHEET



Jotun Protects Property

Jotapipe HT 2005

Section 1. Identification

Product name : Jotapipe HT 2005

Standard Name ID : 16440

Product type : Powder coating.

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

Identified uses

Use in coatings - Industrial use

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Section 2. Hazards identification

Classification of the substance or mixture : SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
SKIN SENSITISATION - Category 1
REPRODUCTIVE TOXICITY - Category 1B
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 2
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

GHS label elements

Hazard pictograms :



Signal word : Danger.

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Section 2. Hazards identification

- Hazard statements** : H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H360 - May damage fertility or the unborn child.
H411 - Toxic to aquatic life with long lasting effects.
- Precautionary statements**
- Prevention** : P201 - Obtain special instructions before use.
P280 - Wear protective gloves, protective clothing and eye or face protection.
P273 - Avoid release to the environment.
P261 - Avoid breathing dust.
- Response** : P391 - Collect spillage.
P308 + P313 - IF exposed or concerned: Get medical advice or attention.
P362 + P364 - Take off contaminated clothing and wash it before reuse.
P302 + P352 - IF ON SKIN: Wash with plenty of water.
P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.
P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
- Storage** : Not applicable.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.
- CAS number/other identifiers**
- CAS number** : Not applicable.
- EC number** : Mixture.
- Product code** : 16440

| Ingredient name | % | CAS number |
|-----------------------------------|------|------------|
| epoxy resin (MW ≤ 700) | ≤10 | 1675-54-3 |
| bisphenol a | ≤10 | 80-05-7 |
| zinc | ≤3 | 7440-66-6 |
| calcium oxide | ≤3 | 1305-78-8 |
| epoxy-formaldehyde resin (MW<700) | ≤3 | 9003-36-5 |
| 1h-imidazole, 2-methyl- | <0.3 | 693-98-1 |
| zinc oxide | ≤0.3 | 1314-13-2 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention

Section 4. First aid measures

immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
stomach pains
reduced foetal weight
increase in foetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
halogenated compounds
metal oxide/oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Fire/explosion hazards** : Fine dust clouds may form explosive mixtures with air.

Section 6. Accidental release measures

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. 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".
- 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and material for containment and cleaning up

- Small spill** : Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Section 7. Handling and storage

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

See Technical Data Sheet / packaging for further information.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------|---|
| bisphenol a | GBZ 2.1 (China, 8/2019). PC-TWA: 5 mg/m ³ 8 hours. |
| calcium oxide | GBZ 2.1 (China, 8/2019). PC-TWA: 2 mg/m ³ 8 hours. |
| zinc oxide | GBZ 2.1 (China, 8/2019). PC-STEL: 5 mg/m ³ 15 minutes. Form: PC-TWA: 3 mg/m ³ 8 hours. Form: |

Dust Limit : 10 mg/m³ (TWA of total inhalable dust) and 4 mg/m³ (TWA of respirable)

- 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 appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- 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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 8. Exposure controls/personal protection

- Eye protection** : Safety eyewear complying to EN 166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
The breakthrough time must be greater than the end use 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.
Recommended, gloves(breakthrough time) > 8 hours: PVC, neoprene, butyl rubber, fluor rubber, Viton®, PE, nitrile rubber
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : 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** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Solid. Powder.
- Colour** : Various
- Odour** : Odourless.
- Odour threshold** : Not available.
- pH** : Not applicable.
- Melting point** : Not applicable.
- Boiling point** : Not available.
- Flash point** : Not available.
- Burning time** : Not available.
- Burning rate** : Not available.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.

Section 9. Physical and chemical properties

| | |
|---|---|
| Minimum ignition energy (mJ) | : 10 - 30 |
| Lower explosion limit | : 30 g/m ³ |
| Vapour pressure | : Highest known value: 0 kPa (0 mm Hg) (at 20°C) (bisphenol a). |
| Vapour density | : Not available. |
| Relative density | : 1.37 to 1.47 g/cm ³ |
| Solubility | : Insoluble in the following materials: cold water and hot water. |
| Partition coefficient: n-octanol/water | : Not available. |
| Auto-ignition temperature | : > 400°C |
| Decomposition temperature | : >250°C (>482°F) |
| SADT | : Not available. |
| Viscosity | : Not applicable. |

Section 10. Stability and reactivity

| | |
|---|--|
| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : No specific data. |
| Incompatible materials | : Not applicable. |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Fine dust clouds may form explosive mixtures with air.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-------------|---------|-------------|----------|
| epoxy resin (MW ≤ 700) | LD50 Dermal | Rabbit | 20 g/kg | - |
| | LD50 Oral | Mouse | 15600 mg/kg | - |
| 1h-imidazole, 2-methyl- | LD50 Oral | Mouse | 1400 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|------------------------|------------------------------|-------|--------------------------------------|-------------|
| epoxy resin (MW ≤ 700) | Eyes - Severe irritant | Rabbit | - | 24 hours 2 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 500 milligrams | - |
| bisphenol a | Eyes - Severe irritant | Rabbit | - | 24 hours 250 Micrograms | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 250 milligrams | - |
| | Eyes - Irritant | Mammal - species unspecified | - | - | - |
| zinc | Skin - Mild irritant | Human | - | 72 hours 300 Micrograms Intermittent | - |
| calcium oxide | Eyes - Irritant | Mammal - species unspecified | - | - | - |
| | Skin - Mild irritant | Mammal - species unspecified | - | - | - |

Section 11. Toxicological information

| | | | | | |
|-----------------------------------|----------------------|------------------------------|---|-----------------|---|
| epoxy-formaldehyde resin (MW<700) | Skin - Mild irritant | unspecified Mammal - species | - | - | - |
| zinc oxide | Eyes - Mild irritant | unspecified Rabbit | - | 24 hours 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |

Sensitisation

| Product/ingredient name | Route of exposure | Species | Result |
|-----------------------------------|-------------------|------------------------------|-------------|
| epoxy resin (MW ≤ 700) | skin | Mammal - species unspecified | Sensitising |
| bisphenol a | skin | Mammal - species unspecified | Sensitising |
| epoxy-formaldehyde resin (MW<700) | skin | Mammal - species unspecified | Sensitising |

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|---------------|------------|-------------------|------------------------------|
| bisphenol a | Category 3 | - | Respiratory tract irritation |
| calcium oxide | Category 3 | - | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

Section 11. Toxicological information

- Inhalation** : Adverse symptoms may include the following:
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
reduced foetal weight
increase in foetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
stomach pains
reduced foetal weight
increase in foetal deaths
skeletal malformations

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : May damage fertility.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|---|---|--|
| epoxy resin (MW ≤ 700) | Acute EC50 1.4 mg/l Acute LC50 3.1 mg/l Chronic NOEC 0.3 mg/l | Daphnia Fish - pimephales promelas Fish | 48 hours 96 hours 21 days |
| bisphenol a | Acute EC50 1000 µg/l Marine water Acute EC50 1.506 mg/l Acute EC50 7.75 mg/l Fresh water Acute LC50 1.34 mg/l Marine water | Algae - Skeletonema costatum Algae - Prorocentrum minimum - Exponential growth phase Daphnia - Daphnia magna - Neonate Crustaceans - Americamysis bahia - Larvae | 96 hours 72 hours 48 hours 48 hours |

Date of issue : 26.02.2021

Section 12. Ecological information

| | | | |
|--|--|---|----------|
| zinc epoxy-formaldehyde resin (MW<700) 1h-imidazole, 2-methyl- zinc oxide | Acute LC50 3.5 mg/l Marine water | Fish - Rivulus marmoratus - Embryo | 96 hours |
| | Chronic NOEC 2 mg/l Fresh water | Algae - Chlorolobion braunii - Exponential growth phase | 4 days |
| | Chronic NOEC 0.05 mg/l Fresh water | Crustaceans - Asellus aquaticus - Juvenile (Fledgling, Hatchling, Weanling) | 21 days |
| | Chronic NOEC 30 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 21 days |
| | Chronic NOEC 0.2 µg/l Fresh water | Fish - Carassius auratus - Adult | 90 days |
| | Acute LC50 330 µg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 0.78 mg/l Fresh water | Fish | 96 hours |
| | Acute EC50 2 mg/l | Daphnia | 24 hours |
| | Acute LC50 2 mg/l | Fish | 96 hours |
| | Acute LC50 286000 to 307000 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| Acute LC50 1.1 ppm Fresh water | Fish - Oncorhynchus mykiss | 96 hours | |
| Chronic NOEC 0.02 mg/l Fresh water | Algae - Pseudokirchneriella subcapitata - Exponential growth phase | 72 hours | |

Persistence/degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-----------------------------------|-------------------|------------|------------------|
| epoxy resin (MW ≤ 700) | - | - | Not readily |
| zinc | - | - | Not readily |
| epoxy-formaldehyde resin (MW<700) | - | - | Not readily |
| zinc oxide | - | - | Not readily |

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-----------------------------------|--------------------|----------|-----------|
| epoxy resin (MW ≤ 700) | 2.64 to 3.78 | 31 | low |
| bisphenol a | 3.4 | 20 to 67 | low |
| calcium oxide | - | 2.34 | low |
| epoxy-formaldehyde resin (MW<700) | 2.7 | - | low |
| 1h-imidazole, 2-methyl- | 0.24 | - | low |
| zinc oxide | - | 28960 | high |

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

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

Section 13. Disposal considerations

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

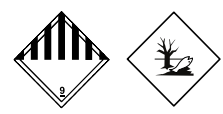
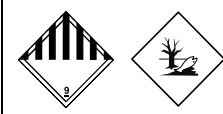
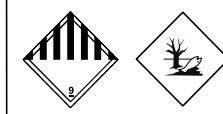
Date of issue : 26.02.2021

Section 13. Disposal considerations

material and runoff and contact with soil, waterways, drains and sewers.

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.

| | UN | IMDG | IATA |
|-------------------------------------|---|--|---|
| UN number | UN3077 | UN3077 | UN3077 |
| UN proper shipping name | Environmentally hazardous substance, solid, n.o.s. (zinc) | Environmentally hazardous substance, solid, n.o.s. (zinc). Marine pollutant (epoxy resin (MW ≤ 700), bisphenol a) | Environmentally hazardous substance, solid, n.o.s. (zinc) |
| Transport hazard class(es) | 9  | 9  | 9  |
| Packing group | III | III | III |
| Environmental hazards | Yes. | Yes. | Yes. |
| Special precautions for user | Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. | Transport 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 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. |
| Additional information | This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. | This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Emergency schedules F-A, S-F | This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8. |

Marking : The environmental hazardous / marine pollutant mark is only applicable for packages containing more than 5 litres for liquids and 5 kg for solids.

ADR / RID : Tunnel restriction code: (-)
Hazard identification number: 90

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product:

Law of the People's Republic of China on the Prevention and Control of Occupational Diseases

Regulations on the Control over Safety of Dangerous Chemicals

Measures for Environmental Management of New Chemical Substances

Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes

Safety regulations for the use of chemicals in the workplace

General Rule for Classification and Hazard Communication of Chemicals

Classification and code of dangerous goods

List of Goods banned for Importing

None of the components are listed.

Section 15. Regulatory information

List of Goods banned for Exporting

None of the components are listed.

List of Toxic Chemicals Severely Restricted for Importing & Exporting by China

None of the components are listed.

Section 16. Other information

History

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Key to abbreviations :

- ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- UN = United Nations

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.