SAFETY DATA SHEET



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Penguard WF Wintergrade Comp B

Section 1. Identification

| Product name | : Penguard WF Wintergrade Comp |
|----------------------------------|--------------------------------|
| Code | : 26200 |
| Product description | : Hardener. |
| Product type | : Liquid. |
| Other means of identification | : Not available. |

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

| Identified uses | | |
|--|--|--|
| Use in coatings - Industr Use in coatings - Profess | | |
| Supplier | : Jotun Australia Pty. Ltd. 59 Calarco Drive, Derrimut, VIC 3026, Australia | |
| | Phone: + 61 39314 0722 E-mail: SDSJotun@jotun.com | |
| Emergency telephone number | : Medical Emergencies 24 hours: Poisons Information Centre (Australia) 131 126 | |

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Section 2. Hazard(s) identification

| Classification of the substance or mixture | LAMMABLE LIQUIDS - Category 3 KIN CORROSION/IRRITATION - Category 2 ERIOUS EYE DAMAGE/EYE IRRITATION - Cate KIN SENSITISATION - Category 1 ONG-TERM (CHRONIC) AQUATIC HAZARD - Ca | |
|--|---|-------|
| GHS label elements | | |
| Hazard pictograms | | |
| Signal word | /ARNING | |
| Hazard statements | 226 - Flammable liquid and vapour. 315 - Causes skin irritation. 317 - May cause an allergic skin reaction. 319 - Causes serious eye irritation. 411 - Toxic to aquatic life with long lasting effe | ects. |
| Precautionary statements | | |

Section 2. Hazard(s) identification

| | • / | |
|---|-----|---|
| Prevention | : | P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment. P261 - Avoid breathing vapour. |
| Response | : | P391 - Collect spillage. 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 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention. |
| Storage | : | Not applicable. |
| Disposal | : | P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| Supplemental label elements | : | Not applicable. |
| Other hazards which do not result in classification | : | None known. |

Section 3. Composition and ingredient information

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

| Ingredient name | % (w/w) | CAS number |
|--|-----------|--------------|
| epoxy resin (MW ≤ 700) | ≥60 - ≤75 | 1675-54-3 |
| 3-butoxypropan-2-ol | ≥10 - ≤30 | 5131-66-8 |
| hydrocarbons, C9-unsaturated, polymerized | ≤10 | 71302-83-5 |
| 1-methoxy-2-propanol | ≤10 | 107-98-2 |
| Phenol, methylstyrenated | ≤5 | 68512-30-1 |
| Phenol, styrenated | ≤5 | 61788-44-1 |
| 2-Propenoic acid, reaction products with pentaerythritol | <3 | 1245638-61-2 |

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

| _ | | | | | |
|-------|----|----|----|---|-----------|
| - E \ | | CO | nt | 2 | <u>nt</u> |
| - E \ | 16 | LU | | a | - |
| | - | | | | |

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

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Section 4. First aid measures

| Inhalation | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. 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. |
|--------------|--|
| Skin contact | : 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. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| Ingestion | : Wash out mouth with water. Remove dentures if any. 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. Get medical attention if adverse health effects persist or are severe. 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/e | ffec | ts, acute and delayed | | |
|-------------------------------|------------|---|--|--|
| Potential acute health effect | <u>ts</u> | | | |
| Eye contact | : | Causes serious eye irritation. | | |
| 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/symp | ton | <u>15</u> | | |
| Eye contact | - | Adverse symptoms may include the following: pain or irritation watering redness | | |
| Inhalation | 1 | No specific data. | | |
| Skin contact | 1 | Adverse symptoms may include the following: irritation redness | | |
| Ingestion | 1 | No specific data. | | |
| Indication of immediate med | <u>ica</u> | l attention and special treatment needed, if necessary | | |
| Notes to physician | : | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. | | |
| Specific treatments | 1 | No specific treatment. | | |
| Protection of first-aiders | : | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. | | |

See toxicological information (Section 11)

Section 5. Firefighting measures

| | - |
|--|--|
| Extinguishing media | |
| Suitable extinguishing media | : Recommended: alcohol-resistant foam, CO ₂ , powders, water spray. |
| Unsuitable extinguishing media | : Do not use water jet. |
| Specific hazards arising from the chemical | : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. 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 |
| 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. |
| Hazchem code | : •3Y |
| | |

Section 6. Accidental release measures

| Personal precautions, protect | ive 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". |
| 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 con | tainment 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

Section 6. Accidental release measures

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).

Precautions for safe handling

| Protective measures | : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. |
|--|---|
| Advice on general occupational hygiene | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| Conditions for safe storage, including any incompatibilities | : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. |

See Technical Data Sheet / packaging for further information.

Section 8. Exposure controls and 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).

Control parameters

Occupational exposure limits

epoxy resin (MW \leq 700)

1-methoxy-2-propanol

DFG MAC-values list (Germany, 7/2023). Skin sensitiser. Safe Work Australia (Australia, 10/2022). STEL: 553 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 369 mg/m³ 8 hours. TWA: 100 ppm 8 hours.

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Biological exposure indices

No exposure indices known.

| Section 8. Expos | ure controls and personal protection |
|-------------------------------------|---|
| Appropriate engineering controls | : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering control also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. |
| Environmental exposure controls | : Emissions from ventilation or work process equipment should be checked to ensu they comply with the requirements of environmental protection legislation. In som cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |
| Individual protection meas | <u>ures</u> |
| Hygiene measures | : Wash hands, forearms and face thoroughly after handling chemical products, bef |
| | eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothin 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. |
| Eye/face protection | : Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mist 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 | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicate this is necessary. Considering the parameters specified by the glove manufacture 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 glov material. |
| | Always ensure that gloves are free from defects and that they are stored and use correctly. |
| | The performance or effectiveness of the glove may be reduced by physical/chemic damage and poor maintenance. |
| | Barrier creams may help to protect the exposed areas of the skin but should not b applied once exposure has occurred. |
| | Wear suitable gloves tested to ISO 374-1:2016. |
| | May be used, gloves(breakthrough time) 4 - 8 hours: neoprene (> 0.35 mm), 4H/ Silver Shield® (> 0.07 mm) |
| | Recommended, gloves(breakthrough time) > 8 hours: Viton® (> 0.7 mm), butyl rubber (> 0.4 mm), nitrile rubber (> 0.75 mm) |
| Body protection | : Use chemical-resistant protective suit / disposable overall. |
| | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. |
| Other skin protection | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Data of issue/Data of revision | 120.05.2024 Data of provious issue 15.05.2022 Version 11.09 |

Section 8. Exposure controls and personal protection

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

| <u>Appearance</u> | | | | | |
|--|---|--|--|--|--|
| Physical state | 1 | Liquid. | | | |
| Colour | 1 | Yellow. | | | |
| Odour | 1 | Characteristic. | | | |
| Odour threshold | 1 | Not applicable. | | | |
| рН | 1 | lot applicable. | | | |
| Melting point | 1 | Not applicable. | | | |
| Boiling point | 1 | Lowest known value: 120.17°C (248.3°F) (1-methoxy-2-propanol). Weighted average: 263.08°C (505.5°F) | | | |
| Flash point | 1 | Closed cup: 55°C (131°F) | | | |
| Evaporation rate | 1 | 0.814 (1-methoxy-2-propanol) compared with butyl acetate | | | |
| Flammability (solid, gas) | 1 | Not available. | | | |
| Lower and upper explosive (flammable) limits | : | Greatest known range: Lower: 1.48% Upper: 13.74% (1-methoxy-2-propanol) | | | |
| Vapour pressure | 1 | Highest known value: 1.1 kPa (8.5 mm Hg) (at 20°C) (1-methoxy-2-propanol). Weighted average: 0.08 kPa (0.6 mm Hg) (at 20°C) | | | |
| Vapour density | : | Highest known value: 11.7 (Air = 1) (epoxy resin (MW ≤ 700)). Weighted average: 10.15 (Air = 1) | | | |
| Relative density | 1 | 1.081 g/cm ³ | | | |
| Solubility(ies) | 1 | | | | |
| Media | | Result | | | |
| cold water hot water | | Not soluble Not soluble | | | |
| Partition coefficient: n- octanol/water | : | Not available. | | | |
| Auto-ignition temperature | 1 | : Lowest known value: 260°C (500°F) (3-butoxypropan-2-ol). | | | |
| Decomposition temperature | 1 | Not available. | | | |
| Viscosity | : | Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt) | | | |

Section 10. Stability and reactivity

| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
|------------------------------------|---|
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |
| Incompatible materials | : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids. |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Penguard WF Wintergrade Comp B

Section 11. Toxicological information

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.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided.

Contains 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, hydrocarbons, C9-unsaturated, polymerized, Phenol, methylstyrenated, Phenol, styrenated, 2-Propenoic acid, reaction products with pentaerythritol, hexamethylene diacrylate; hexane-1,6-diol diacrylate. May produce an allergic reaction.

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 | - |
| 3-butoxypropan-2-ol | LD50 Dermal | Rabbit | 3100 mg/kg | - |
| | LD50 Dermal | Rabbit | 3100 mg/kg | - |
| hydrocarbons, | LD50 Dermal | Rat | 2000 mg/kg | - |
| C9-unsaturated, polymerized | t l | | | |
| | LD50 Oral | Rat | 2000 mg/kg | - |
| 1-methoxy-2-propanol | LD50 Dermal | Rabbit | 13 g/kg | - |
| | LD50 Oral | Rat | 6600 mg/kg | - |
| Phenol, styrenated | LD50 Dermal | Rabbit | >5010 mg/kg | - |
| - | LD50 Oral | Rat | 2500 mg/kg | - |

Irritation/Corrosion **Product/ingredient name** Result **Species** Score **Exposure** Observation epoxy resin (MW \leq 700) Rabbit 24 hours 2 Eyes - Severe irritant milligrams Skin - Mild irritant Rabbit 500 milligrams 3-butoxypropan-2-ol Eyes - Mild irritant Mammal species unspecified Skin - Mild irritant Mammal species unspecified 1-methoxy-2-propanol Eves - Mild irritant Rabbit 24 hours 500 mg Skin - Mild irritant 500 mg Rabbit Skin - Mild irritant Phenol, methylstyrenated Mammal species unspecified Phenol, styrenated Eves - Mild irritant Rabbit 0.1 Mililiters Skin - Mild irritant Mammal species unspecified Skin - Mild irritant Rabbit 0.5 Mililiters Date of previous issue Date of issue/Date of revision : 29.05.2024 8/13 : 15.06.2023 Version : 1.08

| Penguard WF Wintergrade Comp B | | | | | | |
|--|----------------------|------------------------------------|---|---|---|--|
| Section 11. Toxicological information | | | | | | |
| 2-Propenoic acid, reaction products with pentaerythritol | Eyes - Irritant | Mammal - species unspecified | - | - | - | |
| | Skin - Mild irritant | Mammal - species unspecified | - | - | - | |

Sensitisation

| Product/ingredient name | Route of exposure | Species | Result | |
|--|-------------------|---------------------------------|-------------|--|
| epoxy resin (MW ≤ 700) | skin | Mammal - species unspecified | Sensitising | |
| hydrocarbons, C9-unsaturated, polymerized | skin | Mouse | Sensitising | |
| Phenol, methylstyrenated | skin | Mammal - species unspecified | Sensitising | |
| Phenol, styrenated | skin | Mammal - species unspecified | Sensitising | |
| 2-Propenoic acid, reaction products with pentaerythritol | 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 | | Route of exposure | Target organs |
|----------------------|------------|----------------------|------------------|
| 1-methoxy-2-propanol | Category 3 | - | Narcotic effects |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes : Not available. of exposure

Potential acute health effects

| Eye contact | : Causes serious eye irritation. |
|--------------|--|
| 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 | | 5 | | | |
|--------------------------------|--------------|------------------------|--------------|---------------|--------|
| Date of issue/Date of revision | : 29.05.2024 | Date of previous issue | : 15.06.2023 | Version : 1.0 | 8 9/13 |

Section 11. Toxicological information

| Inhalation | : No sp | ecific data. |
|------------------------------|-----------------------------|--|
| Skin contact | Adver irritatio redne | |
| Ingestion | No sp | ecific data. |
| Delayed and immediate effe | s as wel | l as chronic effects from short and long-term exposure |
| <u>Short term exposure</u> | | |
| Potential immediate effects | Not a | vailable. |
| Potential delayed effects | Not av | vailable. |
| Long term exposure | | |
| Potential immediate effects | Not av | vailable. |
| Potential delayed effects | Not av | vailable. |
| Potential chronic health eff | : <u>ts</u> | |
| Not available. | | |
| General | | sensitized, a severe allergic reaction may occur when subsequently exposed y low levels. |
| Carcinogenicity | : No kn | own significant effects or critical hazards. |
| Mutagenicity | : No kn | own significant effects or critical hazards. |
| Teratogenicity | : No kn | own significant effects or critical hazards. |
| | | |

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|-------|----------------|
| Oral | 27928.57 mg/kg |

Section 12. Ecological information

Toxicity Product/ingredient name Result **Species Exposure** epoxy resin (MW \leq 700) Acute EC50 1.4 mg/l 48 hours Daphnia Fish - pimephales promelas Acute LC50 3.1 mg/l 96 hours Chronic NOEC 0.3 mg/l Fish 21 days 72 hours Phenol, styrenated Acute EC50 100 mg/l Algae Acute EC50 54 mg/l Daphnia 48 hours Acute LC50 25.8 mg/l Fish 96 hours

Persistence and degradability

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

Bioaccumulative potential

| Date of issue/Date of revision | : 29.05.2024 | Date of previous issue | : 15.06.2023 | Version : 1.08 10/13 |
|--------------------------------|--------------|------------------------|--------------|----------------------|

Section 12. Ecological information

| Product/ingredient name | LogPow | BCF | Potential |
|--|--------------|-----|-----------|
| epoxy resin (MW ≤ 700) | 2.64 to 3.78 | 31 | low |
| 3-butoxypropan-2-ol | 1.2 | - | low |
| hydrocarbons, | 3.627 | - | low |
| C9-unsaturated, polymerized | | | |
| 1-methoxy-2-propanol | <1 | - | low |
| Phenol, methylstyrenated | 3.627 | - | low |
| 2-Propenoic acid, reaction products with pentaerythritol | 1.45 | - | low |

| <u>Mobility in soil</u> | | |
|-------------------------|--|--|
| Soil/water partition | | |
| coefficient (Koc) | | |

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

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

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

| | ADG | ADR/RID | IMDG | ΙΑΤΑ |
|-------------------------------|---|------------------------|--------------|---|
| UN number | UN1263 | UN1263 | UN1263 | UN1263 |
| UN proper shipping name | Paint | Paint | Paint | Paint |
| Transport hazard class(es) | 3 | | | 3 |
| Packing group | | Ш | 111 | |
| Environmental hazards | Yes. The environmentally hazardous substance mark is not required. | Yes. | Yes. | Yes. The environmentally hazardous substance mark is not required. |
| Date of issue/Date of rev | rision : 29.05.2024 | Date of previous issue | : 15.06.2023 | Version : 1.08 11/2 |

Section 14. Transport information

Penguard WF Wintergrade Comp B

Section 14. Transport information

| Additional informationHazchem code•3YThe environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. Hazard identification number 30 Tunnel code (D/E)The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency Schedules F-E, S-EThe environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.The environmentally mark is not required when transported in sizes of ≤5 L or ≤5 kg.The environmentally mark is not required transported in sizes of ≤5 L or ≤5 kg.The environmentally hazardous sub transported in required by oth transportation regulations. | ear if |
|--|--------|

| port within user's premises: always transport in closed containers that are |
|--|
| t and secure. Ensure that persons transporting the product know what to do in ent of an accident or spillage. |
| |

| Transport in bulk according to IMO instruments | : Not available. |
|--|-------------------------------|
| Marine pollutant substances | : epoxy resin (MW \leq 700) |

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.

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

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

Australia inventory (AIIC) : Not determined.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.

Section 16. Any other relevant information

| <u>His</u> | <u>tory</u> | |
|------------|-------------|--|
| _ | | |

| Date of printing Date of issue/Date of revision | : 29.05.2024 : 29.05.2024 |
|---|------------------------------|
| Date of previous issue | : 15.06.2023 |
| Version | : 1.08 |

Section 16. Any other relevant information

| Key to abbreviations | ADG = Australian Dangerous Goods ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate 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) |
|----------------------|--|
| | MARPOL = International Convention for the Prevention of Pollution From Ships, |
| | SUSMP = Standard for the Uniform Scheduling of Medicines and Poisons UN = United Nations |

Procedure used to derive the classification

| Classification | Justification |
|--|---|
| SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1 | On basis of test data Calculation method Calculation method Calculation method Calculation method |

References

: Not available.

✓ Indicates information that has changed from previously issued version.

Disclaimer

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.