SAFETY DATA SHEET



Multicolor Colorant FS

Section 1. Identification of the substance/mixture and of the company/undertaking

| GHS product identifier | : Multicolor Colorant FS |
|----------------------------------|---|
| Product code | : 23883 |
| Other means of identification | : Not available. |
| Product description | : Colouring material. Waterborne paint. |
| Product type | : Liquid. |

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

Use in coatings - Industrial use Use in coatings - Professional use

| Manufacturing country | Jotun Thailand Limited 700/353 Amata Nakorn Industrial Estate (BIP 2) Moo 6, Tumbol Donhualoh, Amphur Muang Chonburi Chonburi 20000 Thailand |
|-------------------------------|---|
| | Phone: + 66 2 022 9888 Fax: + 66 2 022 9888 , + 66 38 214 375 |
| | SDSJotun@jotun.com |
| Emergency telephone number | Jotun Thailand Limited Phone: + 66 2 022 9888 ext. 2100, 2400, 2402 |

Section 2. Hazards identification

| : SKIN CORROSION/IRRITATION - Category 3 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SKIN SENSITISATION - Category 1A SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
|---|
| |
| |
| : Danger. |
| H316 - Causes mild skin irritation. H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H411 - Toxic to aquatic life with long lasting effects. |
| |

Section 2. Hazards identification

| Precautionary statements | | |
|--------------------------|---|--|
| Prevention | : | P280 - Wear protective gloves. Wear eye or face protection. P273 - Avoid release to the environment. P261 - Avoid breathing vapour. |
| Response | : | P391 - Collect spillage. P363 - Wash contaminated clothing 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 | 1 | Not applicable. |
| Disposal | : | P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. |

| Other hazards which do not | 1 | None known. |
|----------------------------|---|-------------|
| result in classification | | |

Section 3. Composition/information on ingredients

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

| Ingredient name | % | CAS number |
|---|--------|-------------|
| Alcohols, C12-14, ethoxylated, sulfates, sodium salts | ≤5 | 68891-38-3 |
| 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., inner salts | ≤3 | 147170-44-3 |
| poly(oxy-1,2-ethanediyl), alpha-isotridecyl-omega-hydroxy-, phosphate | ≤3 | 73038-25-2 |
| 2-octyl-2h-isothiazol-3-one (OIT) | ≤0.1 | 26530-20-1 |
| bronopol | ≤0.1 | 52-51-7 |
| 3-iodo-2-propynyl butylcarbamate (IPBC) | <0.1 | 55406-53-6 |
| C(M)IT/MIT (3:1) | <0.003 | 55965-84-9 |

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 immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, | |

Section 4. First aid measures

| | 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. 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 effe | <u>cts</u> |
|---------------------------------|---|
| Eye contact | : Causes serious eye damage. |
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : Causes mild skin irritation. May cause an allergic skin reaction. |
| Ingestion | : No known significant effects or critical hazards. |
| <u>Over-exposure signs/symp</u> | <u>otoms</u> |
| Eye contact | : Adverse symptoms may include the following: pain watering redness |
| Inhalation | : No specific data. |
| Skin contact | : Adverse symptoms may include the following: pain or irritation redness blistering may occur |
| Ingestion | : Adverse symptoms may include the following: stomach pains |
| Indication of immediate me | dical 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 | In a fire or if heated, a pressure increase will occur and the container may burst. 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 phosphorus oxides halogenated compounds carbonyl halides 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. |

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. Do not breathe 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 | ta | nment and cleaning up |
| Small spill | : | Stop leak if without risk. Move containers from spill area. 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. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

Section 7. Handling and storage

| Precautions for safe handling | 1 | |
|--|---|---|
| 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 breathe vapour or mist. 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. |

Section 8. Exposure controls/personal protection

| Control parameters Occupational exposure limits None. | |
|---|---|
| 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. |
| Eye/face protection : | Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. |
| Skin protection | |

Section 8. Exposure controls/personal 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 ISO 374-1:2016. May be used, gloves(breakthrough time) 4 - 8 hours: polyvinyl alcohol (PVA) (> 0.3 mm) |
| | Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber (> 0.75 mm), neoprene (> 0.35 mm) |
| 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. |
| | If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter. |
| | |

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

| <u>Appearance</u> | |
|---|--|
| Physical state | : Liquid. |
| Colour | : Violet. |
| Odour | : Faint odour. |
| Odour threshold | : Not available. |
| рН | : 7-9 |
| Melting point/freezing point | : 0 |
| Boiling point, initial boiling point, and boiling range | : Lowest known value: 100°C (212°F) (water). |
| Flash point | : Closed cup: 100°C (212°F) |
| Date of issue/Date of revision | : 15.04.2024 |

| Date of issue/Date of revision | Date of | [;] issue/Date | of revision | |
|--------------------------------|---------|-------------------------|-------------|--|
|--------------------------------|---------|-------------------------|-------------|--|

Section 9. Physical and chemical properties and safety characteristics

| Evaporation rate | : | 0.36 (water) com | pared with butyl acetate |
|--|---|------------------------------|---|
| Flammability | : | Not applicable. | |
| Lower and upper explosion limit/flammability limit | : | Not applicable. | |
| Vapour pressure | : | Highest known v | alue: 2.3 kPa (17.5 mm Hg) (at 20°C) (water). |
| Relative vapour density | : | Not available. | |
| Relative density | : | 1.3 to 1.6 g/cm ³ | |
| Solubility | : | cold water hot water | Easily soluble Easily soluble |
| Partition coefficient: n- octanol/water | : | Not available. | |
| Auto-ignition temperature | : | Not available. | |
| Decomposition temperature | : | Not available. | |
| Viscosity | : | Kinematic (40°C | (104°F)): >20.5 mm²/s (>20.5 cSt) |
| Flow time (ISO 2431) | : | Not available. | |
| Particle characteristics | | | |
| Median particle size | : | 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 | : 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. |

Section 11. Toxicological information

Information on toxicological effects

| <u>Acute toxicity</u> | | | | |
|--|-------------|---------|------------|----------|
| Product/ingredient name | Result | Species | Dose | Exposure |
| 2-octyl-2h-isothiazol-3-one (OIT) | LD50 Dermal | Rabbit | 690 mg/kg | - |
| | LD50 Dermal | Rabbit | 690 mg/kg | - |
| | LD50 Oral | Rat | 550 mg/kg | - |
| 3-iodo-2-propynyl butylcarbamate (IPBC) | LD50 Oral | Rat | 1470 mg/kg | - |
| C(M)IT/MIT (3:1) | LD50 Oral | Rat | 53 mg/kg | - |

Irritation/Corrosion

Section 11. Toxicological information

| _ | | | Г | 1 |
|--------------------------|--|---|--|--|
| Result | Species | Score | Exposure | Observation |
| Eyes - Irritant | Mammal - | - | - | - |
| - | species | | | |
| | unspecified | | | |
| Skin - Mild irritant | Mammal - | - | - | - |
| | species | | | |
| | unspecified | | | |
| Eyes - Irritant | | - | - | - |
| | | | | |
| | unspecified | | | |
| | | | | |
| | | | | |
| Eyes - Irritant | | - | - | - |
| | | | | |
| | | | | |
| Skin - Mild Irritant | | - | - | - |
| | | | | |
| Even Irritent | | | | |
| Eyes - Imiani | | - | - | - |
| | | | | |
| Skin Mild irritant | | | | |
| | | - | - | - |
| | | | | |
| Skin - Mild irritant | | _ | 24 hours 500 | _ |
| | | | | |
| Skin - Moderate irritant | Human | - | | - |
| Skin - Moderate irritant | Rabbit | - | 0 | - |
| | Mammal - | - | - | - |
| | species | | | |
| | unspecified | | | |
| | Eyes - Irritant Skin - Mild irritant Eyes - Irritant Eyes - Irritant Skin - Mild irritant Eyes - Irritant Skin - Mild irritant Skin - Mild irritant Skin - Mild irritant | Eyes - IrritantMammal - species unspecified Mammal - species unspecified Mammal - species unspecifiedEyes - IrritantMammal - species unspecifiedEyes - IrritantMammal - species unspecifiedEyes - IrritantMammal - species unspecifiedEyes - IrritantMammal - species unspecifiedSkin - Mild irritantMammal - species unspecifiedEyes - IrritantMammal - species unspecifiedSkin - Mild irritantMammal - species unspecifiedSkin - Mild irritantMammal - species unspecifiedSkin - Mild irritantHuman | Eyes - IrritantMammal - species unspecifiedSkin - Mild irritantMammal - species unspecifiedEyes - IrritantMammal - species unspecifiedEyes - IrritantMammal - species unspecifiedEyes - IrritantMammal - species unspecifiedEyes - IrritantMammal - species unspecifiedSkin - Mild irritantHuman RabbitSkin - Moderate irritant Eyes - IrritantHuman Rabbit | Eyes - IrritantMammal - species unspecified- - - - species unspecifiedSkin - Mild irritantMammal - species unspecified- - - - species unspecifiedEyes - IrritantMammal - species unspecified- - - - - species unspecifiedEyes - IrritantMammal - species unspecified- - - - - species unspecifiedEyes - IrritantMammal - species unspecified- - - - - species unspecifiedSkin - Mild irritantMammal - species unspecified- - - - - species unspecifiedSkin - Mild irritantMammal - species unspecified- - - - species unspecifiedSkin - Mild irritantHuman Rabbit-Skin - Moderate irritant Skin - Moderate irritant Eyes - IrritantHuman Rabbit - - speciesSkin - Moderate irritant Eyes - IrritantHuman - - - - species |

Sensitisation

| Product/ingredient name | Route of exposure | Species | Result |
|--|-------------------|---------------------------------|-------------|
| 2-octyl-2h-isothiazol-3-one (OIT) | skin | Mammal - species unspecified | Sensitising |
| 3-iodo-2-propynyl butylcarbamate (IPBC) | skin | Mammal - species unspecified | Sensitising |
| C(M)IT/MIT (3:1) | skin | Mammal - species unspecified | Sensitising |

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

| Product/ingredient name | | Route of exposure | Target organs |
|-------------------------|------------|----------------------|------------------------------|
| bronopol | Category 3 | - | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

Section 11 Toxicological information

| | | | Category | Route of exposure | Target organs |
|--|---------------|---|----------------------|--------------------|---------------------|
| 3-iodo-2-propynyl butylcarba | ma | te (IPBC) | Category 1 | - | trachea |
| Aspiration hazard | | | | | |
| Not available. | | | | | |
| nformation on likely routes of exposure | : | Not available. | | | |
| Potential acute health effects | <u>s</u> | | | | |
| Eye contact | : | Causes serious eye dama | ige. | | |
| Inhalation | : | No known significant effec | ts or critical haza | rds. | |
| Skin contact | : | Causes mild skin irritation | . May cause an a | llergic skin react | ion. |
| Ingestion | : | No known significant effect | ts or critical haza | rds. | |
| Symptoms related to the phy | <u>/sic</u> | al, chemical and toxicolo | gical characteris | stics | |
| Eye contact | : | Adverse symptoms may ir pain watering redness | nclude the followin | ıg: | |
| Inhalation | : | No specific data. | | | |
| Skin contact | : | Adverse symptoms may in pain or irritation redness blistering may occur | nclude the followin | ıg: | |
| Ingestion | : | Adverse symptoms may in stomach pains | clude the followin | g: | |
| Delayed and immediate offer | <u>:ts</u> | as well as chronic effects | from short and | long-term expo | <u>sure</u> |
| Selayed and infinediate ener | | | | | |
| Short term exposure | | | | | |
| | : | Not available. | | | |
| Short term exposure Potential immediate | | Not available. Not available. | | | |
| Short term exposure Potential immediate effects | | | | | |
| Short term exposure Potential immediate effects Potential delayed effects | : | | | | |
| Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate | : | Not available. | | | |
| Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects | : | Not available. Not available. Not available. | | | |
| Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects | : | Not available. Not available. Not available. | | | |
| Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects Potential chronic health effe | : : ect | Not available. Not available. Not available. S Once sensitized, a severe | allergic reaction r | may occur when | subsequently expose |
| Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects Potential chronic health effects Not available. General | : : ect | Not available. Not available. Not available. S Once sensitized, a severe to very low levels. | C C | | subsequently expose |
| Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects Potential delayed effects Potential chronic health effects Not available. | : : ect | Not available. Not available. Not available. S Once sensitized, a severe | cts or critical haza | rds. | subsequently expose |

Acute toxicity estimates

Section 11. Toxicological information

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|------------------|-------------------|--------------------------------|-----------------------------------|--|
| 2-octyl-2h-isothiazol-3-one (OIT) | 125 | 311 | N/A | N/A | 0.27 |
| bronopol | 500 | 1100 | N/A | N/A | N/A |
| 3-iodo-2-propynyl butylcarbamate (IPBC) | 500 | N/A | N/A | N/A | 0.5 |
| C(M)IT/MIT (3:1) | 53 | 50 | N/A | 0.5 | N/A |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|----------------------------------|--|----------|
| 1-Propanaminium, 3-amino- N-(carboxymethyl)-N,N- dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., inner salts | Acute EC50 1.9 mg/l | Algae | 48 hours |
| | Acute LC50 11.1 mg/l | Fish | 96 hours |
| poly(oxy-1,2-ethanediyl), alpha-isotridecyl-omega- hydroxy-, phosphate | Acute EC50 11 mg/l | Daphnia | 48 hours |
| 2-octyl-2h-isothiazol-3-one (OIT) | Acute EC50 0.084 mg/l | Algae - Scenedesmus subspicatus | 72 hours |
| | Acute EC50 0.32 mg/l | Daphnia | 48 hours |
| | Acute LC50 0.047 mg/l | Fish | 96 hours |
| bronopol | Acute EC50 0.18 ppm Marine water | Algae - Skeletonema costatum | 96 hours |
| | Acute EC50 1.6 ppm Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 11.17 ppm Fresh water | Fish - Lepomis macrochirus | 96 hours |
| | Chronic NOEC 1.94 ppm | Fish - Oncorhynchus mykiss | 49 days |
| 3-iodo-2-propynyl butylcarbamate (IPBC) | Acute EC50 0.022 mg/l | Algae - Scenedesmus subspicatus | 72 hours |
| | Acute EC50 0.16 mg/l | Crustaceans - Daphnia magna | 48 hours |
| | Acute LC50 0.067 mg/l | Fish - Oncorhynchus mykiss | 96 hours |
| | Chronic NOEC 70 ppb Fresh water | Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| C(M)IT/MIT (3:1) | Acute EC50 0.048 mg/l | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 0.0052 mg/l | Algae - Skeletonema costatum | 48 hours |
| | Acute EC50 0.1 mg/l | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 0.22 mg/l | Fish - Oncorhynchus mykiss | 96 hours |
| | Acute NOEC 0.00064 mg/l | Algae - Skeletonema costatum | 48 hours |
| | Chronic NOEC 0.0012 mg/l | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Chronic NOEC 0.004 mg/l | Daphnia - Daphnia magna | 21 days |
| | Chronic NOEC 0.098 mg/l | Fish - Oncorhynchus mykiss | 28 days |

Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| 3-iodo-2-propynyl butylcarbamate (IPBC) | - | - | Readily |
| C(M)IT/MIT (3:1) | - | - | Not readily |

Bioaccumulative potential

Section 12. Ecological information

| Product/ingredient name | LogPow | BCF | Potential |
|---|-----------|-----------|------------|
| Alcohols, C12-14, ethoxylated, sulfates, sodium salts | 0.3 | - | low |
| 1-Propanaminium, 3-amino- N-(carboxymethyl)-N,N- dimethyl-, N-(C8-18 and C18-unsatd. acyl) derivs., inner salts | 1.79 | 71 | low |
| 2-octyl-2h-isothiazol-3-one (OIT) | 2.45 | - | low |
| bronopol C(M)IT/MIT (3:1) | 0.18 - | - 3.16 | low low |

Mobility in soil

| Soi | l/water | ' parti | tion |
|-----|---------|---------|------|
| coe | fficien | t (Koc |) |

: Not available.

Other adverse effects

ects : No known significant effects or critical hazards.

Section 13. Disposal considerations

| Diamaga I waathaada | The new particulation of constants are called by a considered on an initial and any constants are called |
|---------------------|--|
| 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 spilt material and runoff and contact with soil, waterways, drains and sewers. |

Section 14. Transport information

| | UN | IMDG | ΙΑΤΑ |
|-------------------------------|--|---|--|
| UN number | UN3082 | UN3082 | UN3082 |
| UN proper shipping name | Environmentally hazardous substance, liquid, n.o.s. (2-octyl-2h-isothiazol-3-one (OIT)) | Environmentally hazardous substance, liquid, n.o.s. (2-octyl-2h-isothiazol-3-one (OIT)). Marine pollutant (poly (oxy-1,2-ethanediyl), alpha- isotridecyl-omega-hydroxy-, phosphate) | Environmentally hazardous substance, liquid, n.o.s. (2-octyl-2h-isothiazol-3-one (OIT)) |
| Transport hazard class(es) | 9 | 9 | |
| Packing group | - | - | - |
| Environmental hazards | Yes. | Yes. | Yes. |

Additional information

Section 14. Transport information

| - - - | | |
|--|---|--|
| ADR / RID | : | This product is not regulated as a dangerous good when transported in sizes of $\leq 5 L$ or $\leq 5 kg$, 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. <u>Hazard identification number</u> 90 <u>Tunnel code</u> (-) |
| UN | : | This product is not regulated as a dangerous good when transported in sizes of \leq 5 L or \leq 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. |
| IMDG | - | This product is not regulated as a dangerous good when transported in sizes of \leq 5 L or \leq 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 |
| ΙΑΤΑ | • | This product is not regulated as a dangerous good when transported in sizes of \leq 5 L or \leq 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. |
| 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 in bulk according to IMO instruments | : | Not available. |

Section 15. Regulatory information

Harmful Chemicals List : Not listed

International regulations

<u>Chemical Weapon Convention List Schedules I, II & III Chemicals</u> Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

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UNECE Aarhus Protocol on POPs and Heavy Metals
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Not listed.

Section 16. Other information

| <u>History</u> | |
|--------------------------------|--|
| Date of printing | : 15.04.2024 |
| Date of issue/Date of revision | : 15.04.2024 |
| Date of previous issue | : 15.04.2024 |
| Version | : 1.02 |
| Key to abbreviations | 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) |
| | |

Section 16. Other information

N/A = Not available SGG = Segregation Group UN = United Nations

Procedure used to derive the classification

| Classification | Justification |
|---|--------------------|
| SKIN CORROSION/IRRITATION - Category 3 | Calculation method |
| SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 | Calculation method |
| SKIN SENSITISATION - Category 1A | Calculation method |
| SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 2 | Calculation method |
| LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 | Calculation method |

References

: Not available.

V Indicates information that has changed from previously issued version.

Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.