

Health & Safety Data Sheet – Bio-Dine

1. IDENTIFICATION OF THE PREPARATION AND COMPANY PRODUCT NAME:

Trade Name: Bio-Dine
Name and Address of Contact: BioLink Limited
Unit 2 Becklands Park Ind Est
Market Weighton
York YO43 3GA
Tel: 01430-876611
Fax: 01430-876622

Hazard details are held by the National Poisons Service

2. COMPOSITION/INFORMATION ON INGREDIENTS

Aqueous solution of mineral acids, surfactant and iodine

Hazardous Ingredients:

| Material or Component | % Range | Symbol | Risk Phrases |
|-----------------------|---------|--------|--------------|
| Sulphuric acid | 5-10 | C | R35 |
| Phosphoric acid | 5-10 | C | R34 |
| Nonionic surfactant | 20-30 | Xn | R22, R36/38 |
| Available Iodine | <3 | Xn | R20/R21 |

3. HAZARDS IDENTIFICATION

Causes burns.

4. FIRST AID MEASURES

Skin Contact: Remove contaminated clothing. Wash off immediately with water. Obtain immediate medical attention.
Inhalation: Remove patient from exposure. If there is respiratory distress, give oxygen, then obtain urgent medical attention.
Ingestion: Wash out mouth with water, then give plenty of milk or water to drink and obtain urgent medical attention, showing the label. Do not induce vomiting.
Eyes: Immediately irrigate with eyewash solution or clean water, holding the eyelids apart for at least 1 minutes. Obtain immediate medical attention.

5. FIRE-HAZARD AND FIRE FIGHTING PROCEDURES

Extinguishing media: Not classed as flammable. If involved in fire, may emit noxious and toxic fumes by reaction with other materials. Keep containers cool by water spray. Normal extinguishing media.

Protection Equipment for Fire Fighting: Full protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear PVC gloves, footwear, chemically resistant overalls and eye/face protection.
Environmental Precautions: Wash spillage area with plenty of water. Flush washings to a sewage treatment system. Spillages or uncontrolled discharges into water-courses must be alerted to National Rivers Authority.
Spillage's: Absorb with sand, earth or other suitable absorbent material. Transfer to a container for disposal according to local regulations.

7. HANDLING AND STORAGE

Handling: Wear gloves and eye/face protection.
Dilute by adding the product to the water. NEVER WATER TO THE PRODUCT.
Storage: Store in a cool place away from light, in the original, clearly labelled container. Keep tightly closed. Keep away from hypochlorite and other oxidising agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: None required when used in well ventilated areas
Hand Protection: Chemical resistant gloves must be worn.
Eye Protection: Eye goggles, safety spectacles or face shield must be worn.
Skin Protection: PVC or other impermeable suit.
Chemical Resistant Footwear: Occupational Exposure Limits

| Hazardous Ingredient(s) | Occupational Exposure Limits | | | | (15 mins) mg/m ³ type |
|-------------------------|------------------------------|-----|-----|------|-------------------------------------|
| | LTEL | 8hr | TWA | STEL | |
| Sulphuric acid | - | | 1 | - | - |
| OES | | | | | |
| Phosphoric acid | - | | 1 | - | 3 |
| OES | | | | | |
| Iodine | - | | - | 0.1 | 1 |
| OES | | | | | |

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Colour: Clear dark brown liquid
Odour: Faint iodine/surfactant
pH Value: 0 (approx.)
Boiling Pt. (°C): 102
Melting Pt. (°C)ash point °C: -2
Flash P. (°C): Boils without flashing
Auto Ignition Temp (°C): Not Applicable
Explosive Limits in Air: Not Applicable
Vapour Pressure @ 20°C: No data
Relative Density @ (20°C): 1.17
Water Solubility: Soluble
Other Data:

10. STABILITY AND REACTIVITY

Conditions to avoid: Temperatures above 40°C
Materials to avoid: Alkalis, aluminium, zinc, tin, hypochlorites, or other chlorine releasing materials.
Hazardous decomposition products: Much heat is produced when mixed with concentrated alkalis. Chlorine is released from hypochlorites. Flammable hydrogen gas is produced from contacts with aluminium, zinc, tin or other metals.

11. TOXICOLOGICAL INFORMATION

Inhalation: Exposure to spray causes burns to the nose, throat and upper respiratory tract.
Skin Contact: Causes burns.
Eye Contact: Severe irritation and burns
Ingestion: Severe irritation and corrosion of the mouth, throat and digestive tract.

12. ECOLOGICAL INFORMATION

Biodegradability: The surfactant is readily biodegraded during biological effluent treatment.
Toxicity: Harmful to aquatic life. Acidic pH values cause increased mortality among fish populations
Effect on Effluent: The acidity is neutralised by organic matter in the effluent and has little effect on biological treatment systems. Similarly the available iodine is absorbed by organic matter in the effluent.

Distribution: Completely water soluble: No bioaccumulation
Mobility: Surfactant and iodine will not accumulate in sludge or sediments

13. DISPOSAL CONSIDERATIONS

Product: Absorb in earth or sand and dispose of as solid waste in accordance with local regulations.
Packages: Containers should be cleaned by appropriate methods and disposed of by landfill or incineration as appropriate.

14. TRANSPORT INFORMATION

| | |
|------------------------------|---|
| Classification for Transport | Corrosive |
| U.N No. | 1760 |
| UN Proper Shipping Name: | Corrosive liquid, not otherwise specified (Contains sulphuric acid) |
| ADR/RID class | Class 8 |
| ADR/RID Item No. | N/A |
| IMDG packing group | II |
| IMDG Class: | 8 |

15. REGULATORY INFORMATION

| | |
|--------------------|---|
| EEC Classification | Corrosive |
| Hazard symbol | C |
| Risk phrases | |
| R34 | Causes burns |
| Safety phrases | |
| S1/2 | Keep locked up and out of reach of children |
| S7/9 | Keep container tightly closed in a well ventilated place |
| S14 | Keep away from aluminium and its alloys |
| S23 | Do not breathe fumes |
| S25 | Avoid contact with the eyes |
| S26 | In case of contact with eyes or skin, rinse immediately with plenty of water and seek medical advice |
| S30 | Never add water to this product |
| S36/38 | Wear suitable protective clothing including gloves and, if ventilation is insufficient, suitable respiratory equipment. |
| S45 | In case of accident, or if you feel unwell, seek medical advice immediately (Show label if possible) |

16. OTHER INFORMATION

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.