

SAFETY DATA SHEET

Shanghai Macklin Biochemical Technology Co., Ltd. TEL:400-623-8666 FAX:021-50706099 E-mail:sales@macklin.cn WEB:www.macklin.cn

1. IDENTIFICATION

Product name: Azoxybenzene CAS No. : 495-48-7 Brand: Macklin Company: Shanghai Macklin Biochemical Co.,Ltd. Address: Shanghai Pudong Zhangjiang High-tech Park; 1st Building, 68 Huatuo Road; SHANGHAI CHINA Zip code: 201206 Telephone: +86 21-50706066 Fax: +86 21-50706099 E-mail: sales@macklin.cn; tech@macklin.cn Revision date: 2019/12/12

2. HAZARDS IDENTIFICATION

GHS classification PHYSICAL HAZARDS no data available

HEALTH HAZARDS

no data available

ENVIRONMENTAL HAZARDS

no data available

GHS label elements, including precautionary statements

Pictograms or hazard symbols

Signal word no data available Hazard statements no data available Precautionary statements Prevention no data available

> Response no data available

> Storage no data available

> Disposal no data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components:Azoxybenzene CAS No.:495-48-7 Chemical Formula:C₁₂H₁₀N₂O

4. FIRST AID MEASURES

4.1 Description of necessary first-aid measures

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

4.2

Most important symptoms/effects, acute and delayed

SYMPTOMS: Symptoms of exposure to this compound may include irritation of the skin and eyes. Other symptoms include jaundice, cyanosis, dermatitis and liver and kidney damage. ACUTE/CHRONIC HAZARDS: This compound is an irritant of the skin and eyes. When heated to decomposition it emits toxic fumes of nitrogen oxides. (NTP, 1992)

4.3

Indication of immediate medical attention and special treatment needed, if necessary no data available

5. FIRE-FIGHTING MEASURES

5.1

Suitable extinguishing media

Fires involving this material can be controlled with a dry chemical, carbon dioxide or Halon extinguisher. (NTP, 1992)

5.2

Specific hazards arising from the chemical

Flash point data for this chemical are not available; however, it is probably combustible. (NTP, 1992) 5.3

Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

6.1

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2

Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

6.3

Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

Conditions for safe storage, including any incompatibilities

Materials which are toxic as stored or which can decompose into toxic components...should be stored in a cool well ventilated place, out of direct rays of the sun, away from areas of high fire hazard, and should be periodically inspected... incompatible materials should be isolated...

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure limit values no data available Biological limit values no data available Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

Personal protective equipment

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards no data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state no data available Colour no data available Odour no data available Melting point/freezing point 241°C(lit.) Boiling point or initial boiling point and boiling range 130°C/0.9mmHg(lit.) Flammability no data available Lower and upper explosion limit/flammability limit no data available Flash point 21°C(lit.) Auto-ignition temperature no data available **Decomposition temperature** no data available pН no data available Kinematic viscosity no data available Solubility less than 1 mg/mL at 68° F (NTP, 1992) Partition coefficient n-octanol/water no data available Vapour pressure no data available Density and/or relative density 1.09g/cm3 Relative vapour density

no data available Particle characteristics no data available

10. STABILITY AND REACTIVITY

10.1

Reactivity

Dust may form an explosive mixture in air. Insoluble in water.

10.2

Chemical stability

no data available

10.3

Possibility of hazardous reactions

SLIGHTLY DANGEROUS...AZOXYBENZENE is an azo compound. Azo, diazo, azido compounds can detonate. This applies in particular to organic azides that have been sensitized by the addition of metal salts or strong acids. Toxic gases are formed by mixing materials of this class with acids, aldehydes, amides, carbamates, cyanides, inorganic fluorides, halogenated organics, isocyanates, ketones, metals, nitrides, peroxides, phenols, epoxides, acyl halides, and strong oxidizing or reducing agents. Flammable gases are formed by mixing materials in this group with alkali metals. Explosive combination can occur with strong oxidizing agents, metal salts, peroxides, and sulfides. 10.4

Conditions to avoid no data available 10.5 Incompatible materials no data available 10.6 Hazardous decomposition products On decomposition it emits toxic fumes...

11. TOXICOLOGICAL INFORMATION

Acute toxicity Oral: no data available Inhalation: no data available Dermal: no data available

Skin corrosion/irritation no data available

Serious eye damage/irritation no data available

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Carcinogenicity no data available

Reproductive toxicity no data available

STOT-single exposure no data available

STOT-repeated exposure

no data available

Aspiration hazard no data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity Toxicity to fish: no data available Toxicity to daphnia and other aquatic invertebrates: no data available Toxicity to algae: no data available Toxicity to microorganisms: no data available 12.2 Persistence and degradability no data available 12.3 **Bioaccumulative potential** no data available 12.4 Mobility in soil no data available 12.5 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. TRANSPORT INFORMATION

14.1 **UN Number** ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.) 14.2 **UN Proper Shipping Name** ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.) 14.3 Transport hazard class(es) ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.) 14.4 Packing group, if applicable ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.) 14.5

Environmental hazards ADR/RID: No IMDG: No IATA: No 14.6 Special precautions for user no data available 14.7 Transport in bulk according to IMO instruments no data available

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question EC number 207-802-1 European Inventory of Existing Commercial Chemical Substances (EINECS) Listed. **EC** Inventory Listed. United States Toxic Substances Control Act (TSCA) Inventory Listed. China Catalog of Hazardous chemicals 2015 Not Listed. New Zealand Inventory of Chemicals (NZIoC) Listed. Philippines Inventory of Chemicals and Chemical Substances (PICCS) Listed. Vietnam National Chemical Inventory Listed. Chinese Chemical Inventory of Existing Chemical Substances (China IECSC) Listed. Korea Existing Chemicals List (KECL) Not Listed.

16. OTHER INFORMATION

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.