Classification of the substance or mixture 2.1 Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Acute toxicity, Oral (Category 2) Skin sensitization (Category 1) Classification according to EU Directives 67/548/EEC or 1999/45/EC Toxic if swallowed. May cause sensitization by skin contact. Toxic to aquatic organisms, may cause longterm adverse effects in the aquatic environment. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram Signal word Danger Hazard statement(s) Fatal if swallowed. H300 H317 May cause an allergic skin reaction. Precautionary statement(s) P264 Wash hands thoroughly after handling. P280 Wear protective gloves. P301 + P310IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Supplemental Hazard none Statements According to European Directive 67/548/EEC as amended. Hazard symbol(s) R-phrase(s) R25 Toxic if swallowed. R43 May cause sensitization by skin contact. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. S-phrase(s) Wear suitable protective clothing and gloves. S36/37 In case of accident or if you feel unwell, seek medical advice immediately S45 (show the label where possible). S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets. 2.3 Other hazards - none 3. **COMPOSITION/INFORMATION ON INGREDIENTS** 3.1 Substances Hexamethylene dibromide Synonyms Formula C6H12Br2 Molecular Weight 243,97 g/mol Concentration Component 1,6-Dibromohexane 629-03-8 CAS-No. EC-No. 211-067-2 4. FIRST AID MEASURES 4.1 **Description of first aid measures** General advice Consult a physician. Show this safety data sheet to the doctor in attendance. If inhale d If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician. In case of eye contact Flush eyes with water as a precaution. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 4.2 Most important symptoms and effects, both acute and delayed To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. 4.3 Indication of immediate medical attention and special treatment needed no data available **5.** FIRE-FIGHTING MEASURES 5.1 Extinguishing media Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Special hazards arising from the substance or mixture **5.2** Carbon oxides, Hydrogen bromide gas 5.3 **Precautions for fire-fighters** Wear self contained breathing apparatus for fire fighting if necessary. **5.4 Further information** no data available **6.** ACCIDENTAL RELEASE MEASURES Personal precautions, protective equipment and emergency procedures 6.1 Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. **6.2 Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Methods and materials for containment and cleaning up 6.3 Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. **6.4** Reference to other sections For disposal see section 13. 7. HANDLING AND STORAGE 7.1 **Precautions for safe handling** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection. 7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. 7.3 Specific end uses no data available 8. EXPOSURE CONTROLS/PERSONAL PROTECTION 8.1 Control parameters **Components with workplace control parameters** 8.2 **Exposure controls Appropriate engineering controls** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Personal protective equipment Eye/face protection Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. 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. **Body Protection** Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). 9. PHYSICAL AND CHEMICAL PROPERTIES 9.1 Information on basic physical and chemical properties Appearance Form: clear, liquid a) Colour: brown Odour no data available b) Odour Threshold no data available c) рН no data available d) Melting/freezing point Melting point/range: -2 - 2,5 °C - lit. e) 243 °C - lit. Initial boiling point and f) boiling range 113 °C - closed cup Flash point no data available Evaporation rate h) Flammability (solid, gas) no data available i) Upper/lower j) no data available flammability or explosive limits no data available k) Vapour pressure no data available Vapour density m) Relative density 1,586 g/cm3 at 25 °C Water solubility no data available Partition coefficient: nlog Pow: 3,503 octanol/water no data available Autoignition temperature Decomposition no data available temperature Viscosity no data available Explosive properties no data available Oxidizing properties no data available t) 9.2 Other safety information no data available **10.** STABILITY AND REACTIVITY 10.1 Reactivity no data available 10.2 **Chemical stability** no data available 10.3 Possibility of hazardous reactions no data available 10.4 Conditions to avoid no data available **Incompatible materials** 10.5 Strong oxidizing agents 10.6 Hazardous decomposition products Other decomposition products - no data available 11. **TOXICOLOGICAL INFORMATION** 11.1 **Information on toxicological effects Acute toxicity** no data available Skin corrosion/irritation Skin - rabbit - Mild skin irritation Serious eye damage/eye irritation Eyes - rabbit - Mild eye irritation Respiratory or skin sensitization May cause sensitization by skin contact. no data available Germ cell mutagenicity no data available Carcinogenicity IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. Reproductive toxicity no data available Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure no data available Aspiration hazard no data available Potential health effects Inhalation May be harmful if inhaled. May cause respiratory tract irritation. **Ingestion** May be fatal if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. May cause eye irritation. Eyes Signs and Symptoms of Exposure To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. **Additional Information** RTECS: MO1515000 **12. ECOLOGICAL INFORMATION** 12.1 **Toxicity** 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 Results of PBT and vPvB assessment no data available **12.6** Other adverse effects Toxic to aquatic life. **13. DISPOSAL CONSIDERATIONS** 13.1 Waste treatment methods **Product** Contact a licensed professional waste disposal service to dispose of this material. Offer surplus and nonrecyclable solutions to a licensed disposal company. Contaminated packaging Dispose of as unused product. **14.** TRANSPORT INFORMATION 14.1 **UN-Number** ADR/RID: 2810 IMDG: 2810 IATA: 2810 UN proper shipping name ADR/RID: TOXIC LIQUID, ORGANIC, N.O.S. (1,6-Dibromohexane) IMDG: TOXIC LIQUID, ORGANIC, N.O.S. (1,6-Dibromohexane) IATA: Toxic liquid, organic n.o.s. (1,6-Dibromohexane) 14.3 Transport hazard class(es) ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1 14.4 Packaging group ADR/RID: III IMDG: III IATA: III 14.5 **Environmental hazards** ADR/RID: no IATA: no IMDG Marine pollutant: no 14.6 **Special precautions for users** no data available **15. REGULATORY INFORMATION** This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture no data available 15.2 **Chemical Safety Assessment** no data available **16.** OTHER INFORMATION **Further information** For R&D use only. Not for drug, household or other uses. WARRANTY: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lookchem shall not be held liable www.lookchem.com for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

1.

1.1

1.2

2.

**Product identifiers** 

Product name

Identified uses

HAZARDS IDENTIFICATION

CAS-No.

IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Laboratory chemicals, Manufacture of substances

1,6-Dibromohexane

629-03-8

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