1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING 1.1 **Product identifiers** Benzenesulfonyl isocyanate Product name CAS-No. 2845-62-7 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses Laboratory chemicals, Manufacture of substances 2. HAZARDS IDENTIFICATION 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Acute toxicity, Inhalation (Category 4) Acute toxicity, Oral (Category 4) Skin irritation (Category 2) Eye irritation (Category 2) Respiratory sensitization (Category 1) Skin sensitization (Category 1) Classification according to EU Directives 67/548/EEC or 1999/45/EC Harmful by inhalation and if swallowed. Irritating to eyes and skin. May cause sensitization by inhalation. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram Signal word Danger Hazard statement(s) H302 Harmful if swallowed. H315 Causes skin irritation. May cause an allergic skin reaction. H317 H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. Precautionary statement(s) Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P261 P280 Wear protective gloves. IF IN EYES: Rinse cautiously with water for several minutes. Remove P305 + P351 + P338contact lenses, if present and easy to do. Continue rinsing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ P342 + P311physician. Supplemental Hazard none Statements May produce an allergic reaction. According to European Directive 67/548/EEC as amended. Hazard symbol(s) R-phrase(s) R20/22Harmful by inhalation and if swallowed. R36/38 Irritating to eyes and skin. R42 May cause sensitization by inhalation. S-phrase(s) S23 Do not breathe vapour. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36 Wear suitable protective clothing. 2.3 Other hazards Lachrymator. 3. **COMPOSITION/INFORMATION ON INGREDIENTS** 3.1 Substances Formula C7H5NO3S 183,18 g/mol Molecular Weight Concentration Component Phenylsulphonyl isocyanate CAS-No. 2845-62-7 EC-No. 220-640-6 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. Consult a physician. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. 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 Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., prolonged or repeated exposure can cause:, Nausea, Dizziness, Headache, Lung irritation, Repeated exposure may cause asthma., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. 4.3 Indication of any 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, nitrogen oxides (NOx), Sulphur oxides 5.3 Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary. **5.4 Further information** no data available **6.** ACCIDENTAL RELEASE MEASURES 6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. **Environmental precautions 6.2** Do not let product enter drains. 6.3 Methods and materials for containment and cleaning up 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. Store under inert gas. Moisture sensitive. 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 Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. 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 Form: clear, liquid Appearance a) Colour: light yellow Odour b) no data available Odour Threshold no data available pН no data available d) Melting point/freezing no data available point Initial boiling point and 130 °C at 12 hPa - lit. boiling range Flash point 113 °C - closed cup Evaporation rate no data available h) Flammability (solid, gas) no data available Upper/lower no data available flammability or explosive limits Vapour pressure no data available 1) Vapour density no data available 1,369 g/cm3 at 25 °C m) Relative density Water solubility no data available Partition coefficient: nno data available octanol/water no data available Autoignition temperature no data available Decomposition temperature no data available Viscosity r) Explosive properties no data available S) Oxidizing properties no data available t) 9.2 Other safety information no data available **10.** STABILITY AND REACTIVITY Reactivity 10.1 no data available 10.2 Chemical stability no data available 10.3 Possibility of hazardous reactions no data available 10.4 Conditions to avoid Heat. 10.5 **Incompatible materials** Water, Alcohols, Strong bases, Amines, acids, Strong oxidizing agents Hazardous decomposition products 10.6 Other decomposition products - no data available 11. TOXICOLOGICAL INFORMATION 11.1 **Information on toxicological effects Acute toxicity** no data available Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitization no data available May cause allergic respiratory and skin reactions 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 no data available Specific target organ toxicity - repeated exposure no data available Aspiration hazard no data available Potential health effects Inhalation Harmful if inhaled. Causes respiratory tract irritation. Ingestion Harmful if swallowed. Skin May be harmful if absorbed through skin. Causes skin irritation. Eyes Causes serious eye irritation. Signs and Symptoms of Exposure Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., prolonged or repeated exposure can cause:, Nausea, Dizziness, Headache, Lung irritation, Repeated exposure may cause asthma., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. **Additional Information** RTECS: Not available **12. ECOLOGICAL INFORMATION** 12.1 **Toxicity** no data available 12.2 Persistence and degradability no data available 12.3 **Bioaccumulative potential** no data available Mobility in soil 12.4 no data available 12.5 Results of PBT and vPvB assessment no data available 12.6 Other adverse effects no data available **13. DISPOSAL CONSIDERATIONS** 13.1 Waste treatment methods **Product** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Contaminated packaging Dispose of as unused product. 14. TRANSPORT INFORMATION 14.1 UN number **ADR/RID: 2922** IMDG: 2922 IATA: 2922 UN proper shipping name 14.2 ADR/RID: CORROSIVE LIQUID, TOXIC, N.O.S. (Phenylsulphonyl isocyanate) IMDG: CORROSIVE LIQUID, TOXIC, N.O.S. (Phenylsulphonyl isocyanate) IATA: Corrosive liquid, toxic, n.o.s. (Phenylsulphonyl isocyanate) 14.3 **Transport hazard class(es)** ADR/RID: 8 (6.1) IMDG: 8 (6.1) IATA: 8 (6.1) 14.4 Packaging group ADR/RID: I IMDG: I IATA: I 14.5 **Environmental hazards** IATA: no ADR/RID: no IMDG Marine pollutant: no 14.6 Special precautions for user 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 Look for Chemicals 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.