1.1 **Product identifiers** (R)-(+)- α -Methylbenzyl isocyanate Product name CAS-No. 33375-06-3 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] Skin irritation (Category 2) Eye irritation (Category 2) Respiratory sensitization (Category 1) Skin sensitization (Category 1) Specific target organ toxicity - single exposure (Category 3) Classification according to EU Directives 67/548/EEC or 1999/45/EC Irritating to eyes, respiratory system 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) H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. H334 H335 May cause respiratory irritation. Precautionary statement(s) P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P280 Wear protective gloves. P305 + P351 + P338IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P342 + P311If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician. Supplemental Hazard none Statements May produce an allergic reaction. According to European Directive 67/548/EEC as amended. Hazard symbol(s) R-phrase(s) R36/37/38 Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation. R42 S-phrase(s) S23 Do not breathe vapour. In case of contact with eyes, rinse immediately with plenty of water and S26 seek medical advice. Wear suitable protective clothing. S36 2.3 Other hazards Lachrymator. 3. **COMPOSITION/INFORMATION ON INGREDIENTS** 3.1 Substances Formula C9H9NO Molecular Weight : 147,17 g/mol Concentration Component $R-(+)-\alpha$ -Methylbenzyl isocyanate CAS-No. 33375-06-3 EC-No. 251-485-2 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. Consult a physician. In case of eve contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed Do NOT induce vomiting. 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 burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, prolonged or repeated exposure can cause: Dizziness, Lung irritation, chest pain, pulmonary edema, Repeated exposure may cause asthma., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Indication of immediate medical attention and special treatment needed 4.3 no data available **5.** FIRE-FIGHTING MEASURES 5.1 Extinguishing media Suitable extinguishing media For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water. 5.2 Special hazards arising from the substance or mixture Carbon oxides, nitrogen oxides (NOx), Hydrogen cyanide (hydrocyanic acid) 5.3 **Precautions for fire-fighters** Wear self contained breathing apparatus for fire fighting if necessary. **5.4 Further information** Use water spray to cool unopened containers. **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. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. **6.2 Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. 6.3 Methods and materials for containment and cleaning up Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). 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. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. 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. Recommended storage temperature: 2 - 8 °C 7.3 Specific end uses no data available 8. **EXPOSURE CONTROLS/PERSONAL PROTECTION Control parameters** 8.1 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 Appearance Form: clear, liquid a) Colour: colourless Odour no data available b) Odour Threshold no data available no data available d) рН no data available Melting/freezing point e) 55 - 56 °C at 3,3 hPa f) Initial boiling point and boiling range 65 °C - closed cup Flash point Evaporation rate no data available h) Flammability (solid, gas) no data available 1) Upper/lower no data available flammability or explosive limits Vapour pressure no data available Vapour density no data available m) Relative density 1,045 g/mL at 20 °C Water solubility no data available Partition coefficient: nno data available octanol/water Autoignition no data available temperature Decomposition no data available temperature Viscosity no data available 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 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 Heat, flames and sparks. 10.5 **Incompatible materials** Strong bases, Amines, acids, Strong oxidizing agents Hazardous decomposition products 10.6 Other decomposition products - no data available 11. TOXICOLOGICAL INFORMATION Information on toxicological effects 11.1 Acute toxicity no data available Skin corrosion/irritation no data available Serious eye damage/eye irritation Respiratory or skin sensitization Overexposure can result in development of isocyanate sensitization. Subsequent exposure to isocyanates well below the TLV or to other irritants such as cold air or dust, may trigger asthma-like symptoms including tightness in the chest, coughing, wheezing, and shortness of breath. Sensitization can be temporary or permanent. May cause sensitization by inhalation. Germ cell mutagenicity 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 Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation. Specific target organ toxicity - repeated exposure no data available As piration hazard no data available Potential health effects Inhalation May be harmful if inhaled. Causes respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. Causes skin irritation. Causes serious eye irritation. Eyes Signs and Symptoms of Exposure burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, prolonged or repeated exposure can cause:, Dizziness, Lung irritation, chest pain, pulmonary edema, 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 12.4 Mobility in soil 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** This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. 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: 2206** IMDG: 2206 IATA: 2206 14.2 **UN proper shipping name** ADR/RID: ISOCYANATE, TOXIC, N.O.S. (R-(+)- α -Methylbenzyl isocyanate) IMDG: ISOCYANATES, TOXIC, N.O.S. (R-(+)- α -Methylbenzyl isocyanate) IATA: Isocyanates, toxic, n.o.s. (R-(+)- α -Methylbenzyl isocyanate) 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** IATA: no ADR/RID: 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 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.

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