1-Chlorodecane Product name CAS-No. 1002-69-3 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses Laboratory chemicals, Manufacture of substances **HAZARDS IDENTIFICATION** 2. 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Carcinogenicity (Category 2) Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1) Classification according to EU Directives 67/548/EEC or 1999/45/EC Limited evidence of a carcinogenic effect. Repeated exposure may cause skin dryness or cracking. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram Signal word Warning Hazard statement(s) H351 Suspected of causing cancer. H410 Very toxic to aquatic life with long lasting effects. Precautionary statement(s) P273 Avoid release to the environment. P281 Use personal protective equipment as required. Dispose of contents/ container to an approved waste disposal plant. P501 Supplemental Hazard information (EU) **EUH066** Repeated exposure may cause skin dryness or cracking. According to European Directive 67/548/EEC as amended. Hazard symbol(s) R-phrase(s) R40 Limited evidence of a carcinogenic effect. Repeated exposure may cause skin dryness or cracking. R66 R50/53Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. S-phrase(s) S24 Avoid contact with skin. S36/37 Wear suitable protective clothing and gloves. If swallowed, seek medical advice immediately and show this container or S46 label. This material and its container must be disposed of as hazardous waste. S60 Avoid release to the environment. Refer to special instructions/ Safety S61 data sheets. 2.3 Other hazards - none 3. COMPOSITION/INFORMATION ON INGREDIENTS 3.1 **Substances** Synonyms Decyl chloride Formula C10H21Cl : 176,73 g/mol Molecular Weight Concentration Component 1-Chlorode cane CAS-No. 1002-69-3 EC-No. 213-691-0 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 Flush eyes with water as a precaution. 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 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. 5.2 Special hazards arising from the substance or mixture no data available 5.3 Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary. **5.4 Further information** Use water spray to cool unopened containers. ACCIDENTAL RELEASE MEASURES **6.** 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. **Environmental precautions 6.2** 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 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. Conditions for safe storage, including any incompatibilities 7.2 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 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 Safety glasses with side-shields conforming to EN166 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: liquid a) Odour b) no data available Odour Threshold no data available d) pН no data available Melting point/range: 34 °C - lit. Melting point/freezing point 223 °C - lit. Initial boiling point and boiling range 83 °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 no data available Vapour pressure Vapour density no data available m) Relative density 0,868 g/mL at 25 °C Water solubility no data available Partition coefficient: nno data available 0) octanol/water Autoignition no data available temperature Decomposition no data available temperature Viscosity no data available r) no data available Explosive properties 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 Conditions to avoid 10.4 Heat, flames and sparks. 10.5 **Incompatible materials** Strong bases 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 no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitization no data available Germ cell mutagenicity no data available Carcinogenicity Suspected human carcinogens 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 May be harmful if inhaled. May cause respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation. 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: Not available **12. ECOLOGICAL INFORMATION** 12.1 **Toxicity** no data available 12.2 Persistence and degradability no data available 12.3 **Bioaccumulative potential** 12.4 Mobility in soil 12.5 Results of PBT and vPvB assessment no data available 12.6 Other adverse effects Very toxic to aquatic life with long lasting effects. **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. Contaminated packaging Dispose of as unused product. 14. TRANSPORT INFORMATION 14.1 UN number ADR/RID: 3082 IMDG: 3082 IATA: 3082 14.2 **UN proper shipping name** ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-Chlorodecane) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-Chlorodecane) IATA: Environmentally hazardous substance, liquid, n.o.s. (1-Chlorodecane) 14.3 Transport hazard class(es) ADR/RID: 9 IMDG: 9 IATA: 9 14.4 Packaging group ADR/RID: III IMDG: III IATA: III 14.5 **Environmental hazards** ADR/RID: yes IMDG Marine pollutant: yes IATA: yes 14.6 Special precautions for user **Further information** EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids. **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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**Product identifiers** 

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