1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING 1.1 **Product identifiers** Product name 3-Amino-1-propanol CAS-No. 156-87-6 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 corrosion (Category 1B) Classification according to EU Directives 67/548/EEC or 1999/45/EC Harmful if swallowed. Causes burns. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram Signal word Danger Hazard statement(s) H314 Causes severe skin burns and eye damage. Precautionary statement(s) P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305 + P351 + P338IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. P310 Supplemental Hazard none Statements According to European Directive 67/548/EEC as amended. Hazard symbol(s) R-phrase(s) Harmful if swallowed. R22 R34 Causes burns. S-phrase(s) S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. S36/37/39 In case of accident or if you feel unwell, seek medical advice immediately S45 (show the label where possible). 2.3 Other hazards - none **COMPOSITION/INFORMATION ON INGREDIENTS** 3. 3.1 **Substances** 3-Aminopropyl alcohol Synonyms Formula C3H9NO Molecular Weight 75,11 g/mol Concentration Component 3-Aminopropan-1-ol CAS-No. 156-87-6 EC-No. 205-864-4 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 Take off contaminated clothing and shoes immediately. 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 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 Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Indication of any immediate medical attention and special treatment needed 4.3 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 Carbon oxides, nitrogen oxides (NOx) 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. **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. Discharge into the environment must be avoided. 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. Reference to other sections **6.4** For disposal see section 13. 7. HANDLING AND STORAGE 7.1 **Precautions for safe handling** 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. Hygroscopic. 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 Tightly fitting safety goggles. Faceshield (8-inch minimum). 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: viscous Colour: colourless Odour no data available b) Odour Threshold no data available c) 11,9 at 10 g/l at 20 °C рН d) Melting point/range: 10 - 12 °C Melting point/freezing e) point Initial boiling point and 184 - 187 °C boiling range Flash point 79 °C - closed cup no data available Evaporation rate h) Flammability (solid, gas) no data available Upper/lower Upper explosion limit: 10 %(V) flammability or Lower explosion limit: 2,5 %(V)explosive limits Vapour pressure 0,4 hPa at 20 °C 1) Vapour density 3,01 m) Relative density 0,987 g/mL at 20 °C Water solubility completely miscible Partition coefficient: nlog Pow: -1,04 octanol/water Autoignition no data available temperature Decomposition no data available temperature no data available r) Viscosity no data available Explosive properties 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 oxidizing agents Hazardous decomposition products 10.6 Other decomposition products - no data available 11. TOXICOLOGICAL INFORMATION 11.1 **Information on toxicological effects Acute toxicity** LD50 Oral - rat - 2.796,0 mg/kg LD50 Dermal - rat - > 2.000 mg/kg Skin corrosion/irritation Skin - rabbit - Corrosive Serious eye damage/eye irritation Eyes - rabbit - Severe eye irritation Respiratory or skin sensitization 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 Developmental Toxicity - mouse - Intraperitoneal Specific Developmental Abnormalities: Musculoskeletal system. Specific target organ toxicity - single exposure no data available Specific target organ toxicity - repeated exposure no data available As piration hazard no data available Potential health effects Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Ingestion May be harmful if swallowed. Causes burns. May be harmful if absorbed through skin. Causes skin burns. Skin Eyes Causes eye burns. Signs and Symptoms of Exposure Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. **Additional Information** RTECS: UA5600000 **12. ECOLOGICAL INFORMATION 12.1 Toxicity** LC50 - Leuciscus idus (Golden orfe) - 100 - 220 mg/l - 96 h Toxicity to fish EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h Toxicity to daphnia and other aquatic invertebrates. 12.2 Persistence and degradability no data available 12.3 **Bioaccumulative potential** no data available 12.4 Mobility in soil no data available Results of PBT and vPvB assessment 12.5 no data available **12.6** Other adverse effects Harmful to aquatic life. 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. **Contaminated packaging** Dispose of as unused product. **14.** TRANSPORT INFORMATION 14.1 UN number **ADR/RID: 2735** IMDG: 2735 IATA: 2735 14.2 **UN proper shipping name** ADR/RID: AMINES, LIQUID, CORROSIVE, N.O.S. (3-Aminopropan-1-ol) AMINES, LIQUID, CORROSIVE, N.O.S. (3-Aminopropan-1-ol) IMDG: IATA: Amines, liquid, corrosive, n.o.s. (3-Aminopropan-1-ol) 14.3 **Transport hazard class(es)** ADR/RID: 8 IMDG: 8 IATA: 8 14.4 Packaging group ADR/RID: II IATA: II IMDG: II 14.5 **Environmental hazards** ADR/RID: no IMDG Marine pollutant: no IATA: 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 **OTHER INFORMATION 16. 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.