1,2,4,5-Tetrachloro-3-nitrobenzene Product name CAS-No. 117-18-0 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] Acute toxicity, Oral (Category 4) Skin sensitization (Category 1) Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1) Classification according to EU Directives 67/548/EEC or 1999/45/EC Harmful if swallowed. May cause sensitization by skin contact. 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) H302 Harmful if swallowed. May cause an allergic skin reaction. H317 H410 Very toxic to aquatic life with long lasting effects. Precautionary statement(s) P273 Avoid release to the environment. P280 Wear protective gloves. Dispose of contents/ container to an approved waste disposal plant. P501 Supplemental Hazard none Statements May produce an allergic reaction. According to European Directive 67/548/EEC as amended. Hazard symbol(s) R-phrase(s) R22 Harmful if swallowed. R43 May cause sensitization by skin contact. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. S-phrase(s) S24 Avoid contact with skin. S37 Wear suitable gloves. 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 Formula C6HCl4NO2 Molecular Weight 260,89 g/mol Concentration Component Te cnaze ne CAS-No. 117-18-0 EC-No. 204-178-2 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 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 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. 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 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), Hydrogen chloride gas 5.3 **Precautions for fire-fighters** Wear self contained breathing apparatus for fire fighting if necessary. **5.4 Further information** no data available ACCIDENTAL RELEASE MEASURES **6.** 6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. **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 Pick up and arrange disposal without creating dust. Sweep up and shovel. 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 formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. 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. Moisture sensitive. Store under inert gas. 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** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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: powder Appearance a) Colour: white Odour no data available b) Odour Threshold no data available c) d) рΗ no data available Melting/freezing point Melting point/range: 98 - 101 °C 304 °C at 1.013 hPa Initial boiling point and f) boiling range no data available Flash point g) Evaporation rate no data available i) Flammability (solid, gas) no data available Upper/lower <u>j</u>) no data available flammability or explosive limits Vapour pressure no data available 1) Vapour density no data available m) Relative density no data available 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 STABILITY AND REACTIVITY **10.** 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 10.5 **Incompatible materials** Strong oxidizing agents, 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 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 May be harmful if inhaled. May cause respiratory tract irritation. Inhalation Ingestion 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: DC0175000 **12. ECOLOGICAL INFORMATION** 12.1 **Toxicity** Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0,37 mg/l - 96,0 h 12.2 Persistence and degradability no data available 12.3 **Bioaccumulative potential** Bioaccumulation Oncorhynchus mykiss (rainbow trout) - -7,5 µg/l Bioconcentration factor (BCF): 5.170 12.4 Mobility in soil no data available Results of PBT and vPvB assessment 12.5 no data available 12.6 Other adverse effects Very toxic to aquatic life with long lasting 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. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contaminated packaging Dispose of as unused product. **14.** TRANSPORT INFORMATION 14.1 **UN-Number ADR/RID: 3077** IMDG: 3077 IATA: 3077 14.2 **UN proper shipping name** ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tecnazene) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Tecnazene) IMDG: IATA: Environmentally hazardous substance, solid, n.o.s. (Tecnazene) 14.3 Transport hazard class(es) ADR/RID: 9 IMDG: 9 IATA: 9 Packaging group 14.4 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 users 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

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