



CHEMSYNTH CORPORATION

(Exporter of chemical Raw materials)

B 802 Gundecha, LBS Marg, Kanjurmarg, Mumbai 400 078, India.

Tele: +91 22 2578 9174 fax: +91 22 2569 0837, Email info@chemsynth.co.in

Triclosan (cas 3380-34-5) MSDS

1. 1.1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
Product identifiers
Product name 5-chloro-2-(2,4-dichlorophenoxy)phenol
Product Number Brand Index-No. 524190 604-070-00-9
CAS-No. 3380-34-5 1.2
Relevant identified uses of the substance or mixture and uses advised against Identified uses :
Laboratory chemicals, Manufacture of substances
2. 2 HAZARDS IDENTIFICATION 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) Acute aquatic toxicity (Category 1) Chronic aquatic toxicity (Category 1) Classification according to EU Directives 67/548/EEC or 1999/45/EC Irritating to eyes and skin. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Label elements Labelling according Regulation (EC) No 1272/2008 [CLP] Pictogram Signal word Hazard statement(s) H315 H319 H410 Precautionary statement(s) P273 P305 + P351 + P338 - 524190 Warning Causes skin irritation. Causes serious eye irritation. Very toxic to aquatic life with long lasting effects. Avoid release to the environment. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Supplemental Hazard Dispose of contents/ container to an approved waste disposal plant. none Statements According to European Directive 67/548/EEC as amended. Hazard symbol(s) R-phrase(s) R36/38 R50/53 Irritating to eyes and skin. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. S-phrase(s) S26 S39 S46 S60 S61 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection. If swallowed, seek medical advice immediately and show this container or label. This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/ Safety data sheets. 2.3 3. Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS 3.1 Substances Formula Molecular Weight
Component : : C₁₂H₇Cl₃O₂ 289,54 g/mol Concentration 5-Chloro-2-(2,4-dichlorophenoxy)phenol CAS-No. EC-No. Index-No. 3380-34-5 222-182-2 604-070-00-9
4. FIRST AID MEASURES Description of first aid measures General advice Consult a physician. Show this safety data sheet to the doctor in attendance. If inhaled 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. 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 any immediate medical attention and special treatment needed no data available - FIREFIGHTING MEASURES Extinguishing media Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Special hazards arising from the substance or mixture Carbon oxides, Hydrogen chloride gas Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary. Further information no data available
5. ACCIDENTAL RELEASE MEASURES Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. 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. 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. Reference to other sections For disposal see section 13.
6. HANDLING AND STORAGE 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. Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Specific end uses no data available
7. EXPOSURE CONTROLS/PERSONAL PROTECTION 8.1 8.2 Control parameters Components with workplace control parameters 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.
8. 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. - 524190 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 impervious clothing, 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 Information on basic physical and chemical properties Appearance Odour Odour Threshold pH Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Form: powder Colour: white no data available no data available no data available Melting point/range: 56 - 60 °C - lit. 280 - 290 °C at 1.013 hPa - Decomposes on heating. no data available no data available i) Flammability (solid, gas) no data available j) k) l) Upper/lower flammability or explosive limits Vapour pressure Vapour density no data available no data available no data available m) Relative density no data available n) o) p) q) r) s) t) Water solubility Partition coefficient: noctanol/water Autoignition temperature Decomposition temperature Viscosity Explosive properties Oxidizing properties 12 g/l at 20 °C - OECD Test Guideline 105 log Pow: 4,7 no data available no data available no data available no data available no data available 9.2 Other safety information Dissociation constant 8,14 at 20 °C
10. STABILITY AND REACTIVITY 10.1 Reactivity no data available - 524190 10.2 10.3 10.4 10.5 10.6 11. 11.1 Chemical stability no data available Possibility of hazardous reactions no data available Conditions to avoid no data available Incompatible materials Strong oxidizing agents Hazardous decomposition products Other decomposition products - no data available
11. TOXICOLOGICAL INFORMATION Information on toxicological effects Acute toxicity LD50 Oral - rat - 3.700 mg/kg LD50 Dermal - rabbit - 9.300 mg/kg Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitization no data available Germcell mutagenicity Genotoxicity in vitro - rat - Other cell types - negative Genotoxicity in vivo - rat - male and female - negative 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 - rat - Oral Effects on Embryo or Fetus: Fetal death. 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 Ingestion Skin Eyes May be harmful if inhaled. Causes respiratory tract irritation. May be harmful if swallowed. May be harmful if absorbed through skin. Causes skin irritation. Causes serious 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 Repeated dose toxicity - rat - male and female - Oral - No observed adverse effect level - 75 mg/kg - Lowest observed adverse effect level - 200 mg/kg - 524190 Repeated dose toxicity - rat - male and female - Dermal - No observed adverse effect level - 80 mg/kg - Lowest observed adverse effect level - > 80 mg/kg RTECS: KO1100000
12. ECOLOGICAL INFORMATION Toxicity Toxicity to fish Toxicity to daphnia and other aquatic LC50 - Oncorhynchus mykiss (rainbow trout) - 0,288 mg/l - 96,0 h EC50 - Daphnia magna (Water flea) - 0,39 mg/l - 48 h invertebrates 12.2 Persistence and degradability Biodegradability aerobic - Exposure time 28 d Result: 37 % - Not readily biodegradable. 12.3 12.4 12.5 12.6 13. 13.1 14. 14.1 Bioaccumulative potential no data available Mobility in soil no data available Results of PBT

and vPvB assessment no data available Other adverse effects Very toxic to aquatic life with long lasting effects. Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. 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 UN number 14.2 ADR/RID: 3077 UN proper shipping name IMDG: 3077 IATA: 3077 ADR/RID: IMDG: IATA: ENVIRONMENTALLYHAZARDOUS SUBSTANCE, SOLID, N.O.S. (5-Chloro-2-(2,4- dichlorophenoxy)phenol) ENVIRONMENTALLYHAZARDOUS SUBSTANCE, SOLID, N.O.S. (5-Chloro-2-(2,4- dichlorophenoxy)phenol) Environmentally hazardous substance, solid, n.o.s. (5-Chloro-2-(2,4-dichlorophenoxy)phenol) 14.3 Transport hazard class(es) ADR/RID: 9 14.4 Packaging group ADR/RID: III 14.5 Environmental hazards ADR/RID: yes 14.6 Special precautions for user Further information - 524190 IMDG: 9 IMDG: III IMDG Marine pollutant: yes IATA: 9 IATA: III IATA: yes 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. 15.1 15.2
15. REGULATORYINFORMATION This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Safety, health and environmental regulations/legislation specific for the substance or mixture no data available Chemical Safety Assessment no data available
16. OTHER INFORMATION Further information 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 this document is based on the resent 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. guidechem shall not be held liable 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.