SIGMA-ALDRICH

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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 4.0 Revision Date 13.03.2010

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

Product name : 4-Chloro-3-methylphenol

Product Number : C55402 Brand : Aldrich

Company : Sigma-Aldrich (Shanghai) Trading Co.,Ltd

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No1272/2008

Acute toxicity (Category 4)
Acute toxicity (Category 4)

Serious eye damage (Category 1) Skin sensitization (Category 1) Acute aquatic toxicity (Category 1)

According to European Directive 67/548/EEC as amended.

Harmful in contact with skin and if swallowed. Risk of serious damage to eyes. May cause sensitization by skin contact. Very toxic to aquatic organisms.

Label elements

Pictogram



Signal word Danger

Hazard statement(s)

H400
 H302
 H312
 H317
 H318
 Very toxic to aquatic life.
 Harmful if swallowed.
 Harmful in contact with skin.
 May cause an allergic skin reaction.
 Causes serious eye damage.

Precautionary statement(s)

P273 Avoid release to the environment.

P280 Wear protective gloves/eye protection/face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Hazard symbol(s)

Xn Harmful

N Dangerous for the environment

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R-phrase(s)

R21/22 Harmful in contact with skin and if swallowed.

R41 Risk of serious damage to eyes.

R43 May cause sensitization by skin contact.

R50 Very toxic to aquatic organisms.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S61 Avoid release to the environment. Refer to special instructions/ Safety data

sheets.

Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 4-Chloro-m-cresol

Formula : C₇H₇CIO

Molecular Weight : 142,58 g/mol

| CAS-No. | EC-No. | Index-No. | Classification | Concentration |
|--------------|-----------|--------------|--|---------------|
| Chlorocresol | | | | |
| 59-50-7 | 200-431-6 | 604-014-00-3 | Acute Tox. 4; Eye Dam. 1; Skin Sens. 1; Aquatic Acute 1; H400, H302, H312, H317, H318 Xn, N, R21/22 - R41 - R43 - R50 | - |

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. 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.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

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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. Keep in suitable, closed containers for disposal.

7. 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. Normal measures for preventive fire protection.

Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

Eye protection

Face shield and safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form solid

Safety data

pH 5,6 at 22,9 °C

Melting point 63 - 65 °C - lit.

Boiling point 235 °C - lit.

Flash point 118,0 °C - closed cup

Ignition temperature 590 °C

Lower explosion limit no data available

Upper explosion limit no data available

Vapour pressure 6,9 hPa at 100,0 °C

0,1 hPa at 20,0 °C

Density 1,37 g/cm3 at 20,00 °C

Water solubility soluble

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Partition coefficient: n-octanol/water

log Pow: 3,10

log Pow: 3,02

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

no data available

Materials to avoid

Oxidizing agents, Brass, Copper

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas

Thermal decomposition

200,0 °C

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - rat - 1.830 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

May cause sensitization by skin contact.

The preceding data, or interpretation of data, was determined using Quantitative Structure Activity Relationship (QSAR) modeling.

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

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion Harmful if swallowed.

Skin Harmful if absorbed through skin. May cause skin irritation.

Eyes Causes serious eye irritation.

Signs and Symptoms of Exposure

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Damage to the eyes., Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: GO7100000

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0,92 mg/l - 96,0 h

LC50 - Pimephales promelas (fathead minnow) - 4,2 - 8,9 mg/l - 96,0 h

Toxicity to daphnia and other aquatic invertebrates.

EC50 - Daphnia magna (Water flea) - 4,40 - 5,30 mg/l - 24 h

Immobilization EC50 - Daphnia magna (Water flea) - 1,5 mg/l - 48 h

Toxicity to algae EC50 - No information available. - 12,00 - 18,00 mg/l - 72 h

EC50 - Desmodesmus subspicatus (green algae) - > 10,00 mg/l - 72 h

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

Very toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations. 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

ADR/RID

UN-Number: 3077 Class: 9 Packing group: III

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Chlorocresol)

IMDG

UN-Number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Chlorocresol)

Marine pollutant: No

IATA

UN-Number: 3077 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Chlorocresol)

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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16. OTHER INFORMATION

Text of H-code(s) and R-phrase(s) mentioned in Section 3

Acute Tox. Acute toxicity

Aquatic Acute Acute aquatic toxicity
Eye Dam. Serious eye damage
H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage. H400 Very toxic to aquatic life.

Skin Sens. Skin sensitization

N Dangerous for the environment

Xn Harmful

R21/22 Harmful in contact with skin and if swallowed.

R41 Risk of serious damage to eyes.

R43 May cause sensitization by skin contact.

R50 Very toxic to aquatic organisms.

Further information

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