# **SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006 Version 5.0 Revision Date 19.09.2012 Print Date 22.09.2013

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

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

1.1 Product identifiers

Product name : 5-Chloro-7-iodo-8-quinolinol

Product Number : 24880 Brand : Aldrich CAS-No. : 130-26-7

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Pte Ltd

1 Science Park Road #02-14 The Capricorn

Singapore Science Park Road II

SINGAPORE 117528

**SINGAPORE** 

Telephone : +65 6779 1200 Fax : +65 6779 1822

1.4 Emergency telephone number

Emergency Phone # : 1-800-262-8200

## 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Oral (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Toxic if swallowed.

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram

Signal word Danger

Hazard statement(s)

H301 Toxic if swallowed.

Precautionary statement(s)

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/

physician.

Supplemental Hazard

Statements

none

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

Hazard symbol(s)

R-phrase(s)

R25 Toxic if swallowed.

S-phrase(s)

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

**S45** In case of accident or if you feel unwell, seek medical advice immediately

(show the label where possible).

#### 2.3 Other hazards - none

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 **Substances**

Synonyms Iodochlorhydroxyguin

5-Chloro-8-hvdroxv-7-iodoquinoline

Clioquinol

Formula C<sub>9</sub>H<sub>5</sub>CIINO Molecular Weight 305,50 g/mol

Component		Concentration
Clioquinol		
CAS-No.	130-26-7	-
EC-No.	204-984-4	

#### 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 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. Take victim immediately to hospital. 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

Cough, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration.

#### 4.3 Indication of any immediate medical attention and special treatment needed

no data available

#### 5. FIREFIGHTING MEASURES

#### 5.1 **Extinguishing media**

### Suitable extinguishing media

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

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### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas, Hydrogen iodide

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

no data available

#### 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. 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.

#### 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.

### 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

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### 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.

Immersion protection Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: > 480 min

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Material tested: Dermatril® (Aldrich Z677272, Size M)

Splash protection Material: Nitrile rubber

Minimum laver thickness: 0.11 mm Break through time: > 30 min

Material tested: Dermatril® (Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de,

test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### **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 particle respirator type N99 (US) or type P2 (EN 143) 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

Form: powder Appearance

Colour: light brown

no data available b) Odour

Odour Threshold no data available c)

no data available d) Hq

Melting point/freezing

point

Melting point/range: 171 - 174 °C

f) Initial boiling point and

boiling range

no data available

g) Flash point no data available Evaporation rate no data available Flammability (solid, gas) no data available i)

i) Upper/lower flammability or explosive limits no data available

no data available Vapour pressure k) Vapour density no data available m) Relative density no data available

Water solubility no data available n)

Partition coefficient: noctanol/water

no data available

p) Autoignition no data available temperature

Decomposition no data available temperature

no data available Viscosity r)

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### 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

no data available

#### 10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Acid chlorides, Acid anhydrides

#### 10.6 Hazardous decomposition products

Other decomposition products - no data available

### 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - rat - > 5.000 mg/kg

#### Skin corrosion/irritation

no data available

## Serious eye damage/eye irritation

no data available

#### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

Genotoxicity in vitro - rat - Other cell types

DNA inhibition

## 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

Reproductive toxicity - rat - Oral

Maternal Effects: Ovaries, fallopian tubes. Maternal Effects: Uterus, cervix, vagina.

Developmental Toxicity - rat - Oral

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4). Effects on Newborn: Physical.

Developmental Toxicity - rat - Oral

Specific Developmental Abnormalities: Musculoskeletal system. Effects on Newborn: Growth statistics (e.g., reduced weight gain).

## Specific target organ toxicity - single exposure

no data available

#### Specific target organ toxicity - repeated exposure

no data available

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### **Aspiration hazard**

no data available

#### Potential health effects

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

**Ingestion** Toxic if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

### Signs and Symptoms of Exposure

Cough, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration.

### **Additional Information**

RTECS: VC5075000

#### 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

no data available

## 12.2 Persistence and degradability

no data available

#### 12.3 Bioaccumulative potential

no data available

#### 12.4 Mobility in soil

no data available

#### 12.5 Results of PBT and vPvB assessment

no data available

### 12.6 Other adverse 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: 2811 IMDG: 2811 IATA: 2811

## 14.2 UN proper shipping name

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (Clioquinol) TOXIC SOLID, ORGANIC, N.O.S. (Clioquinol)

IATA: Toxic solid, organic, n.o.s. (Clioquinol)

## 14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

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#### 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

### 16. OTHER INFORMATION

#### **Further information**

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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. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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