

## Material Safety Data Sheet

Version 4.0

Revision Date 03/12/2010

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Cyhexatin

Product Number : 45411

Brand : Fluka

Company : Sigma-Aldrich  
3050 Spruce Street  
SAINT LOUIS MO 63103  
USA

Telephone : +18003255832

Fax : +18003255052

Emergency Phone # : (314) 776-6555

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2. HAZARDS IDENTIFICATION

## Emergency Overview

## OSHA Hazards

Toxic by ingestion

## GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H301 Toxic if swallowed.

H313 May be harmful in contact with skin.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

Precautionary statement(s)

P273 Avoid release to the environment.

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

## HMIS Classification

Health hazard: 1

Flammability: 0

Physical hazards: 0

## NFPA Rating

Health hazard: 1

Fire: 0

Reactivity Hazard: 0

## Potential Health Effects

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

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

**Eyes** May cause eye irritation.

**Ingestion** Toxic if swallowed.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C18H34OSn

Molecular Weight : 385.2 g/mol

| CAS-No.          | EC-No.    | Index-No.    | Concentration |
|------------------|-----------|--------------|---------------|
| <b>Cyhexatin</b> |           |              |               |
| 13121-70-5       | 236-049-1 | 050-002-00-0 | -             |

#### 4. FIRST AID MEASURES

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

##### 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.

##### 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

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

Recommended storage temperature: 2 - 8 °C

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Components with workplace control parameters

| Components | CAS-No.  | Value | Control parameters  | Update     | Basis                                   |
|------------|--|-------|---------------------|------------|---|
| Cyhexatin  | 13121-70-5   | TWA   | 5 mg/m <sup>3</sup> | 2007-01-01 | USA. ACGIH Threshold Limit Values (TLV) |
| Remarks    | Upper Respiratory Tract irritation Kidney damage body weight effects Not classifiable as a human carcinogen: Agents which cause concern that they could be carcinogenic for humans but which |       |                     |            |   |

|  |  |     |         |            |   |
|--|--|-----|---------|------------|---|
|  | cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories. |     |         |            |   |
|  |  | TWA | 5 mg/m3 | 1989-01-19 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |

### 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

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      |
| Colour | colourless |

### Safety data

|                       |                           |
|-----------------------|---------------------------|
| pH                    | no data available         |
| Melting point         | no data available         |
| Boiling point         | no data available         |
| Flash point           | > 100.00 °C (> 212.00 °F) |
| Ignition temperature  | no data available         |
| Lower explosion limit | no data available         |
| Upper explosion limit | no data available         |
| Water solubility      | insoluble                 |

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

no data available

### Materials to avoid

no data available

### Hazardous decomposition products

no data available

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

LD50 Oral - rat - 180 mg/kg

LC50 Inhalation - rat - 244 mg/m3

LC50 Inhalation - mouse - 290 mg/m3

LD50 Dermal - rabbit - 2,422 mg/kg

Remarks: Brain and Coverings:Recordings from specific areas of CNS. Peripheral Nerve and Sensation:Recording from peripheral motor nerve.

**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 - Human - lymphocyte

Sister chromatid exchange

**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.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

Reproductive toxicity - rat - Oral

Effects on Newborn: Growth statistics (e.g., reduced weight gain).

**Specific target organ toxicity - single exposure (GHS)**

no data available

**Specific target organ toxicity - repeated exposure (GHS)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

|                   |   |
|-------------------|---|
| <b>Inhalation</b> | May be harmful if inhaled. May cause respiratory tract irritation.  |
| <b>Ingestion</b>  | Toxic if swallowed.   |
| <b>Skin</b>       | May be harmful if absorbed through skin. May cause skin irritation. |
| <b>Eyes</b>       | May cause eye irritation.   |

**Additional Information**

RTECS: WH8750000

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## 12. ECOLOGICAL INFORMATION

**Toxicity**

|  |  |
|--|--|
| Toxicity to fish                                     | LC50 - Oncorhynchus mykiss (rainbow trout) - 0.001 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates. | EC50 - Daphnia magna (Water flea) - 0.17 mg/l - 48 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**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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### 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.

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### 14. TRANSPORT INFORMATION

**DOT (US)**

UN-Number: 2811 Class: 6.1 Packing group: III  
Proper shipping name: Toxic solids, organic, n.o.s. (Cyhexatin)  
Marine pollutant: Severe marine pollutant  
Poison Inhalation Hazard: No

**IMDG**

UN-Number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A  
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Cyhexatin)  
Marine pollutant: Severe marine pollutant

**IATA**

UN-Number: 2811 Class: 6.1 Packing group: III  
Proper shipping name: Toxic solid, organic, n.o.s. (Cyhexatin)

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### 15. REGULATORY INFORMATION

**OSHA Hazards**

Toxic by ingestion

**DSL Status**

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

|           |                       |
|-----------|-----------------------|
| Cyhexatin | CAS-No.<br>13121-70-5 |
|-----------|-----------------------|

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

|           |                       |                             |
|-----------|-----------------------|-----------------------------|
| Cyhexatin | CAS-No.<br>13121-70-5 | Revision Date<br>1994-04-01 |
|-----------|-----------------------|-----------------------------|

**Pennsylvania Right To Know Components**

|           |                       |                             |
|-----------|-----------------------|-----------------------------|
| Cyhexatin | CAS-No.<br>13121-70-5 | Revision Date<br>1994-04-01 |
|-----------|-----------------------|-----------------------------|

**New Jersey Right To Know Components**

Cyhexatin

CAS-No.  
13121-70-5Revision Date  
1994-04-01**California Prop. 65 Components**

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Cyhexatin

CAS-No.  
13121-70-5Revision Date  
2007-09-28

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**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 Co., 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.

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