



# Safety Data Sheet

## Zinc Pentachlorothiophenol

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Zinc Pentachlorothiophenol

**Synonyms:** Zinc Salt of pentachlorothiophenol, Zinc bis(pentachlorothiophenolate)

**Company Identification:**

Cymer, LLC  
124 Cymer Lane  
Decatur, TN 37322

**For information, call:** 423-334-2778

**For CHEMTEL assistance, call:** 1-888.255.3924

**For International CHEMTEL assistance, call:** +1.813.248.0573

### Section 2 - Hazards Identification

**Emergency Overview**

**OSHA Hazards**


Corrosive

**GHS Classification**

Skin corrosion (Category 1B)

Serious eye damage (Category 1)

**GHS Label elements, including precautionary statements**

Pictogram	 The pictogram shows a red diamond border containing a black silhouette of a hand being corroded by a liquid dripping from a test tube.
Signal word	Corrosive

**Hazard statement(s)**

H314 Causes severe skin burns and eye damage.

**Precautionary statement(s)**

P280 Wear protective gloves/ protective clothing/ 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.

P310 Immediately call a POISON CENTER or doctor/ physician.

**HMIS Classification**

**Health hazard:** 3

**Flammability:** 0

**Physical hazards:** 0

**NFPA Rating**

**Health hazard:** 3

**Fire:** 0

**Reactivity Hazard:** 0

**Potential Health Effects**

**Inhalation** May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**Skin** May be harmful if absorbed through skin. Causes skin burns.

**Eyes** Causes eye burns.

**Ingestion** May be harmful if swallowed.

## Section 3 - Composition, Information on Ingredients

**Zinc Pentachlorothiophenol**

Synonyms: Zinc bis(pentachlorothiophenolate), Zinc Salt of pentachlorothiophenol

Formula : C12Cl10S2Zn

Molecular Weight : 628.18 g/mol

CAS#	Chemical Name	Percent	EINECS/ELINCS
117-97-5	Zinc Pentachlorothiophenol	100.0	204-224-1

## Section 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. Remove all contaminated clothing.

**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.

Do NOT induce vomiting.

## Section 5 - Fire Fighting Measures

### **Suitable extinguishing media**

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

### **Special protective equipment for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **Hazardous combustion products**

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

## Section 6 - Accidental Release Measures

### **Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Avoid breathing vapors, mist or gases.

### **Environmental precautions**

Do not let product enter drains.

### **Methods for cleaning up**

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

## Section 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.

## Section 8 - Exposure Controls, Personal Protection

### **Exposure Limits**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Zinc Pentachlorothiophenol	none listed	none listed	none listed

**OSHA Vacated PELs:** Zinc Pentachlorothiophenol: No OSHA Vacated PELs are listed for this chemical.

### **Personal protective equipment**

#### **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).

#### **Hand 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.

**Eye 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 and 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.

**Hygiene measures**

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

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid, powder

**Appearance:** Gray-white

**Odor:** Not available.

**Odor: Threshold:** no data available

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Ignition temperature:** Not available.

**Auto ignition temperature:** Not available.

**Lower explosion limit:** Not available

**Upper explosion limit:** Not available

**Flash point:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** Decomposes above 350°C.

**Decomposition Temperature:** Not available.

**Solubility:** Not available

**Specific Gravity/Density:** ~2.20 g/cm<sup>3</sup>

**Molecular Formula:** C<sub>12</sub>Cl<sub>10</sub>S<sub>2</sub>Zn

**Molecular Weight:** 628.18 g/mol

## Section 10 - Stability and Reactivity

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

No data available

**Conditions to avoid**

Avoid moisture.

**Materials to avoid**

Strong oxidizing agents.

**Hazardous decomposition products**

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

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

### Acute toxicity

#### Oral LD50

LD50 Oral - rat - 13,200 mg/kg

#### Inhalation LC50

No data available

#### Dermal LD50

No data available

#### Other information on acute toxicity

No data available

### Skin corrosion/irritation

Skin - rabbit - Severe skin irritation - 24 hr

### Serious eye damage/eye irritation

Eyes - rabbit - Severe eye irritation - 24 hr

### 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.

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

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

No data available

### Teratogenicity

No data available

### Specific target organ toxicity - single exposure (Globally Harmonized System)

Inhalation - May cause respiratory irritation.

### Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

### Aspiration hazard

No data available

### Potential health effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation. Material is extremely destructive to the tissue of the mucous membranes.

**Ingestion** Harmful if swallowed.

**Skin** Harmful if absorbed through skin. Causes skin burns, irritation.

**Eyes** Causes eye burns and severe irritation.

#### **Signs and Symptoms of Exposure**

Cough, Shortness of breath, Headache, Nausea, Vomiting, burning of eyes and skin.

#### **Synergistic effects**

no data available

#### **Additional Information**

RTECS: ZH0915000

## Section 12 - Ecological Information

#### **Toxicity**

no data available

#### **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**

no data available

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

#### **Contaminated packaging**

Dispose of as unused product.

## Section 14 - Transport Information

**DOT (US)**

UN number: 1759 Class: 8 Packing group: II  
Proper shipping name: Corrosive solids, n.o.s. (Zinc bis(pentachlorothiophenolate))  
Reportable Quantity (RQ):  
Marine pollutant: No  
Poison Inhalation Hazard: No

#### IMDG

UN number: 1759 Class: 8 Packing group: II EMS-No: F-A, S-B  
Proper shipping name: CORROSIVE SOLID, N.O.S. (Zinc bis(pentachlorothiophenolate))  
Marine pollutant: No

#### IATA

UN number: 1759 Class: 8 Packing group: II  
Proper shipping name: Corrosive solid, n.o.s. (Zinc bis(pentachlorothiophenolate))

## Section 15 - Regulatory Information

#### OSHA Hazards

Corrosive

#### 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

The following components are subject to reporting levels established by SARA Title III, Section 313:

Name	CAS-No.	Revision Date
Zinc bis(pentachlorothiophenolate)	117-97-5	2007-07-01

#### SARA 311/312 Hazards

Acute Health Hazard

#### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know Components

Name	CAS-No.	Revision Date
Zinc bis(pentachlorothiophenolate)	117-97-5	2007-07-01

#### New Jersey Right To Know Components

Name	CAS-No.	Revision Date
Zinc bis(pentachlorothiophenolate)	117-97-5	2007-07-01

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## Section 16 - Additional Information

#### MSDS Creation Date: 2/13/2013

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Cymer, LLC be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Cymer has been advised of the possibility of such damages.*