



# MATERIAL SAFETY DATA SHEET

Ferro Corporation, Polymer Additives Division  
Walton Hills Operation  
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Walton Hills, Ohio 44146-4494 USA

Emergency telephone number:  
CHEMTREC: 1-800-424-9300

Plant Number: 1-216-750-6708

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

**Product Name:** Therm-Chek® 120 LOHF 450 Lb  
Drm  
**Chemical Family:** Polymer Additive  
**Chemical Name:** Barium, Zinc Complex Mixture  
**CAS-No.:** Mixture

Date of Preparation: 10/29/2003

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### Exposure limits

Components	CAS-No	Weight %	OSHA	ACGIH
Phenol	108-95-2	0.1 - 1.0%	19 mg/m <sup>3</sup> TWA 5 ppm TWA prevent or reduce skin absorption	5 ppm TWA skin - potential for cutaneous absorption
Hydrocarbon Process Oil	64742-53-6	5 - 10%	5 mg/m <sup>3</sup> (oil mist)	10 mg/m <sup>3</sup> (oil mist)
Barium compounds, as ba		1 - 5%	0.5 mg/m <sup>3</sup> TWA	0.5 mg/m <sup>3</sup> TWA

The specific chemical identities are being withheld as a trade secret (29CFR1910.1200).

## 3. HAZARDS IDENTIFICATION

### Emergency Overview

Caution

### NFPA 704

<b>Color:</b>	Red amber	<b>Health:</b>	1
<b>Physical state:</b>	Liquid	<b>Fire:</b>	0
<b>Odor:</b>	Mild	<b>Instability:</b>	0

May cause eye/skin irritation. Avoid contact with skin and eyes. May be harmful if absorbed through skin.

### Potential Health Effects

**Principle routes of exposure:** Inhalation, ingestion, skin and eye contact.

#### Eye contact:

May cause slight irritation.

#### Skin contact:

Prolonged skin contact may cause skin irritation and/or dermatitis. May be harmful if absorbed through skin.

#### Inhalation:

May cause irritation of respiratory tract.

#### Ingestion:

May irritate digestive tract.

**Chronic toxicity:**

Prolonged skin contact may cause skin irritation and/or dermatitis..

**HMIS**

Health: 1

Fire: 0

Physical hazard: 0

PPE: B

#### 4. FIRST AID MEASURES

**Eye contact:**

Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops.

**Skin contact:**

Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.

**Inhalation:**

Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms persist, call a physician.

**Ingestion:**

Drink plenty of water. Induce vomiting if person is conscious. Consult a physician if necessary.

**Notes to physician:**

Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

**Flash point:** 106 °C ( 223°F)    Method: PMCC

**Suitable extinguishing media:**

Use dry chemical, CO<sub>2</sub>, water spray or "alcohol" foam.

**Hazardous decomposition products:**

Thermal decomposition can lead to release of irritating gases and vapors. Carbon oxides. BaO.

**Special protective equipment for firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

**Unusual hazards:**

Material may change or decompose on exposure to moisture.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Evacuate area of all unnecessary personnel. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

**Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

**Methods for cleaning up:**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labelled containers. Dispose of promptly. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Handling:

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. In case of insufficient ventilation, wear suitable respiratory equipment.

### Storage:

Keep container tightly closed in a dry and well-ventilated place. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Engineering measures:

Ensure adequate ventilation, especially in confined areas.

### Respiratory protection:

Use NIOSH approved respirator when ventilation is inadequate.

### Hand protection:

Impervious gloves.

### Skin and body protection:

Lightweight protective clothing.

### Eye protection:

Safety glasses with side-shields.

### Exposure limits:

See Section 2.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Red amber
Odor:	Mild
pH:	No data available
Molecular weight:	No data available
Boiling point/range (°C):	No data available
Specific gravity (Water =1):	1.040
Vapor pressure (mmHg):	No data available
Evaporation rate (Water =1):	< 1.00
Water solubility (mg/l):	Insoluble
VOC content (%)	No data available

## 10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Polymerization:	Will not occur.
Hazardous decomposition products:	None under normal use. Possible decomposition products in case of hydrolysis are: phenol, aliphatic alcohol, phosphoric acid.
Materials to avoid:	Strong oxidizing agents. Strong acids and strong bases. Water.
Conditions to avoid:	Exposure to moisture.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

No data is available on the product itself.

### **Chronic toxicity:**

Prolonged skin contact may cause skin irritation and/or dermatitis.

### **Target organ effects:**

Barium compound: Heart. Gastrointestinal tract.

### Component Information

#### Diphenyl isodecyl phosphite

*NIOSH - LD50s and LC50s:*

= 2370 µL/kg Oral LD50 Rat

#### 2,4,6 triisopropylphenol

*NIOSH - LD50s and LC50s:*

= 1670 mg/kg Oral LD50 Rat

#### Phenol

*NIOSH - LD50s and LC50s:*

= 270 mg/kg Oral LD50 Mouse

= 317 mg/kg Oral LD50 Rat

= 630 mg/kg Dermal LD50 Rabbit

*ACGIH - Carcinogens:* A4 - Not Classifiable as a Human Carcinogen

#### Zinc naphthenate

*NIOSH - LD50s and LC50s:*

= 2800 mg/kg Oral LD50 Mouse

= 4920 mg/kg Oral LD50 Rat

#### Calcium naphthenate

*NIOSH - LD50s and LC50s:*

> 6 g/kg Oral LD50 Rat

#### Triphenyl phosphite

*NIOSH - LD50s and LC50s:*

= 1080 mg/kg Oral LD50 Mouse

= 444 mg/kg Oral LD50 Rat

## 12. ECOLOGICAL INFORMATION

No data is available on the product itself.

### **Aquatic toxicity:**

No information available.

### **Persistence and degradability:**

No information available

## 13. DISPOSAL CONSIDERATIONS

### **Waste from residues / unused products:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Where possible recycling is preferred to disposal or incineration.

## 14. TRANSPORT INFORMATION

### DOT:

Proper shipping name: Not regulated.

**Components**

Phenol (0.1 - 1.0%)

**CERCLA/DOT RQ:**

1000 lb

454 kg

**TDG (Canada):**

Proper shipping name: Not regulated.

## 15. REGULATORY INFORMATION

**U.S. Regulations:**

Not subject to TSCA 12(b) Export Notification

Zinc Compound (10 - 20%)

SARA 313: 1.0 percent de minimis concentration (Chemical Category N982)

Phenol (0.1 - 1.0%)

SARA 313: 1.0 percent de minimis concentration

Barium Compound (10 - 20%)

SARA 313: form R reporting required for 1.0% de minimis concentration; Chemical Category N040

Zinc compounds, as Zn (1 - 5%)

SARA 313: form R reporting required for 1.0% de minimis concentration (only fume or dust); Chemical Category N982

Barium compounds, as Ba (1 - 5%)

SARA 313: form R reporting required for 1.0% de minimis concentration; Chemical Category N040

**Components**

Phenol (0.1 - 1.0%)

**CERCLA/DOT RQ:**

1000 lb

454 kg

**State Regulations**

This product or its ingredients have been evaluated for New Jersey, Pennsylvania, and California Prop 65 supplier notification requirements. Substances that are subject to notification requirements, if any, are listed below.

Zinc Compound

NJRTK: 3012

PARTK: Listed

Phenol

NJRTK: sn 1487

PARTK: Listed

Barium Compound

NJRTK: 2146

PARTK: Listed

**Canadian WHMIS**

WHMIS hazard class: D2B Toxic materials.

**WHMIS: Ingredient Disclosure:**

Phenol 1% (English Item 1261, French Item 1374)

Triphenyl phosphite1% (English Item 1654, French Item 1405)

**International inventories**

TSCA 8(b): All the ingredients are on the TSCA list.

Canadian DSL: All the ingredients are on the DSL.

EINECS: All the ingredients are on the EINECS list.

Phillipines (PICCS): Not listed.

Japan (ENCS): Not listed.

Korea (KECL): Not listed.

China: Not listed.

Australia (AICS): Listed.

## **16. OTHER INFORMATION**

### **For Industrial Use Only**

**Prepared by:** Ferro Technical Center

The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the MSDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.

**End of Safety Data Sheet**