



MATERIAL SAFETY DATA SHEET

Ferro Corporation, Polymer Additives Division
Walton Hills Operation
7050 Krick Road
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® RC158L 450 Lb Drm
Chemical Family: Polymer Additive
Chemical Name: Zinc Complex Mixture
Synonyms: Polymer Additive.
CAS-No.: Mixture
Product code: 1314508

Date of Preparation: 01/24/2006

2. HAZARD IDENTIFICATION

Emergency Overview

Warning

WARNING COMBUSTIBLE! Vapors may travel to a source and flash back. Avoid breathing vapors or mists. May cause eye/skin irritation. May cause irritation of respiratory tract.

NFPA 704

Colour: Orange-Red	Health: 1
Physical state: Liquid	Fire: 2
Odour: Phenolic-like	Instability: 0

Potential Health Effects

Principle routes of exposure: Eye contact. Skin contact. Inhalation.

Eye contact: May cause irritation.

Skin contact: May cause irritation. Prolonged skin contact may cause skin irritation and/or dermatitis.

Inhalation: Inhalation of high vapor concentrations can cause CNS-depression and narcosis.

Ingestion: May irritate digestive tract. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %
Petroleum based hydrocarbon		10 - 20%
Zinc compounds		5 - 10%
Aromatic solvent	64742-95-6	1 - 5%
1,2,4-trimethylbenzene	95-63-6	1 - 5%

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

This material contains organo phosphorous compounds which may decompose from hydrolysis to produce phenol, aliphatic alcohol, and phosphoric acid.

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: Clean mouth with water and drink afterwards plenty of water. Consult a physician.

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash point: 84 °C (183°F) Method: PMCC

Suitable extinguishing media: Use dry chemical, CO2, water spray or "alcohol" foam. Do not use a solid water stream as it may scatter and spread fire. Cool containers / tanks with spray water.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapors. Carbon oxides. Hydrocarbons. Heavy metal compounds.

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: Flash back possible over considerable distance. Risk of explosion if heated under confinement. Material may change or decompose on exposure to moisture.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Combustible material. Remove all sources of ignition. Do not breathe vapors/dust. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system.

Methods for cleaning up: Wear personal protective equipment. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Dispose of promptly. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling: Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. In case of insufficient ventilation, wear suitable respiratory equipment.

Storage: Keep product and empty container away from heat and sources of ignition. Keep tightly closed in a dry, cool and well-ventilated place. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

Components	OSHA	ACGIH
Petroleum based hydrocarbon	5 mg/m ³ TWA (mineral oil mist)	5 mg/m ³ TWA (mineral oil mist)

Engineering measures: Ensure adequate ventilation, especially in confined areas.

Eye protection: Safety glasses with side-shields. If splashes are likely to occur, wear:.. Face-shield.

Skin and body protection: Long sleeved clothing.

Hand protection: Impervious gloves.

Respiratory protection: Use NIOSH approved respirator when ventilation is inadequate.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Ensure that eyewash stations and safety showers are proximal to the work-station location. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Colour:	Orange-Red	Appearance:	Clear
Physical state:	Liquid	Odour:	Phenolic-like
Molecular weight:	No data available	Boiling point/range (°C):	No data available
pH:	No data available	Specific gravity (Water =1):	1.006
Vapor pressure (mmHg):	No data available	Evaporation rate (Water =1):	No data available
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: Thermal decomposition can lead to release of irritating gases and vapours. Carbon oxides. Hydrocarbons. Possible decomposition products from hydrolysis: phenol, aliphatic alcohol, phosphoric acid.

Materials to avoid: Strong oxidizing agents. Strong acids and strong bases. Water.

Conditions to avoid: Heat, flames and sparks. Exposure to moisture.

11. TOXICOLOGICAL INFORMATION

Acute toxicity No data is available on the product itself

12. ECOLOGICAL INFORMATION

Aquatic toxicity: Not determined

Persistence and degradability: Not determined

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Dispose of according to all federal, state and local applicable regulations. Where possible recycling is preferred to disposal or incineration.

14. TRANSPORT INFORMATION

DOT (U.S.)

UN/ID No: NA1993

Proper shipping name: Combustible liquid, N.O.S.

Packing group: III

Other shipping information: Not regulated in containers <119 gallons.

TDG (Canada)

Proper shipping name: Combustible liquid, N.O.S.

Packing group: III

15. REGULATORY INFORMATION

U.S. Regulations:

Not subject to TSCA 12(b) Export Notification

Components	SARA 313:
Zinc compound (as Zn) (1 - 5%)	1.0% de minimis concentration (Chemical Category N982)
Zinc compounds (5 - 10%)	1.0% de minimis concentration (Chemical Category N982)

Components	SARA 313:
1,2,4-trimethylbenzene (1 - 5%)	1.0% de minimis concentration

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.

Components	State Regulations - NJ; PA; CA Prop65
Zinc compounds	Listed (PARTK) Listed (NJRTK)
1,2,4-trimethylbenzene	Listed (NJRTK) Listed (PARTK)

Canadian WHMIS

WHMIS hazard class: B3 Combustible liquid. D2B Toxic materials.

Canadian Ingredient Disclosure List (IDL):

Components	WHMIS Ingredient Disclosure:
Triphenyl phosphite	1%
1,2,4-trimethylbenzene	0.1%

International Inventories

TSCA 8(b): Listed or exempt.
 Canadian DSL: Listed or exempt.
 EINECS Listed or exempt.
 Phillipines (PICCS): Listed.
 Japan (ENCS): Not listed.
 Korea (KECL): Listed.
 China (IECS): Listed.
 Australia (AICS): Listed.

16. OTHER INFORMATION

For Industrial Use Only

HMIS

Health: 1

Fire: 2

Physical hazard: 0

PPE: B

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