



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® 654
Chemical Family: Polymer Additive
Chemical Name: Zinc Complex Mixture
CAS-No.: Mixture
Product code: 1035452

Date of Preparation: 07/21/2005

2. HAZARD IDENTIFICATION

Emergency Overview

Caution
May cause eye/skin irritation. Avoid contact with the skin and the eyes.

NFPA 704

Colour: Translucent yellow
Physical state: Liquid
Odour: Pungent

Health: 1
Fire: 1
Instability: 0

Potential Health Effects

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

Eye contact: May cause slight irritation.

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

Inhalation: May cause irritation of respiratory tract.

Ingestion: May irritate digestive tract.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %
Zinc compounds		5 - 10%

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

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. Consult a physician if necessary. Do not induce vomiting without medical advice.

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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Product name: Therm-Chek® 654

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Flash point: 200 °C (392°F) Method: PMCC

Suitable extinguishing media: Use dry chemical, CO2, water spray or "alcohol" foam.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapors.

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: None known

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. 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

Components	OSHA	ACGIH
Vegetable oil derivative	15 mg/m ³ TWA (oil mist)	10 mg/m ³ TWA (oil mist)
Butylated hydroxytoluene	Not established	2 mg/m ³ TWA

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

Eye protection: Safety glasses with side-shields.

Skin and body protection: Lightweight protective 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

Colour:	Translucent yellow	Physical state:	Liquid
Odour:	Pungent	Molecular weight:	No data available
Boiling point/range (°C):	No data available	pH:	No data available
Specific gravity (Water =1):	1.000	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.

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

Conditions to avoid: None known

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: 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.

TDG (Canada)

Proper shipping name: Not regulated.

15. REGULATORY INFORMATION

U.S. Regulations:

Not subject to TSCA 12(b) Export Notification

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

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	NJRTK:	PARTK:	Cal Prop65:
Zinc compounds	3012	Listed	N/A
Benzoic acid	sn 0209	Listed	N/A
Butylated hydroxytoluene	sn 0814	Listed	N/A

Canadian WHMIS

WHMIS hazard class: D2B Toxic materials.

Components

Benzoic acid
Butylated hydroxytoluene

WHMIS Ingredient Disclosure:

1%
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

HMS

Health: 1

Fire: 1

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

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