



MATERIAL SAFETY DATA SHEET

Ferro Corporation, Polymer Additives Division
 Cleveland Operation
 1636 Wayside Road
 Cleveland, Ohio 44112 USA

Emergency telephone number
 CHEMTREC: 1-800-424-9300
 Plant Number: 1-216-750-7020

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY UNDERTAKING

Product Name: Therm-Chek® SP1860
Chemical Family: Polymer Additive
Chemical Name: PVC Powder Stabilizer
CAS-No.: Mixture
Product code: 1035946

Date of Preparation: 12/09/2004

COMPOSITION/INFORMATION ON INGREDIENTS

Exposure limits

Components	CAS-No	Weight %	OSHA	ACGIH
Cadmium compounds, as Cd		10 - 20%	2.5 ug/m ³ action level (as Cd); 5 ug/m ³ TWA (as Cd)	0.002 mg/m ³ TWA 0.01 mg/m ³ TWA
Barium compounds, as Ba		5 - 10%	0.5 mg/m ³ TWA	0.5 mg/m ³ TWA
Bisphenol A	80-05-7	5 - 10%	Not established	Not established

OSHA particulate (not otherwise regulated) limit: 5 mg/m³ (respirable); 15 mg/m³ (total). The specific chemical identities are being withheld as a trade secret (29CFR1910.1200).

HAZARD IDENTIFICATION

Emergency Overview

Caution

May cause eye/skin irritation. May cause irritation of respiratory tract. May cause cancer. May cause sensitization by skin contact.
NFPA 704

Color:	White	Health:	2
Physical state:	Powder	Fire:	1
Odour:	Slight	Instability:	0

Potential Health Effects

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

Eye contact: May cause slight irritation. Resin particles, like other inert materials, are mechanically irritating to eyes.

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

Inhalation: Product dust may be irritating to eyes, skin and respiratory system. Over-exposure by inhalation may cause respiratory irritation. The effects of overexposure to cadmium may include decreased stamina, fatigue, sleep disturbance, headaches, aching bones and muscles, constipation, abdominal pains and decreased appetite. Existing lung or pulmonary conditions may be aggravated by exposure.

Ingestion: May irritate digestive tract.

Chronic toxicity: Excessive inhalation of dust may cause chemical pneumonitis, cyanosis, and pulmonary edema. Cadmium is a cumulative poison and can build up in the body over time to toxic levels. Cadmium causes lung damage and kidney dysfunction and may cause lung or prostate cancer.

HMIS

Health: *2
Fire: 1
Physical hazard: 0
PPE: X

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HARWICK STANDARD

DISTRIBUTION CORPORATION

Product name: Therm-Chek® SP1860

60 S. Seiberling Street • Akron, Ohio 44305

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

Notes to physician: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash point: > 260 °C (500°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. Heavy metal compounds. Carbon oxides. CdO. 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: Dust may form explosive mixture in air.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid dust formation. Evacuate area of all unnecessary personnel. Avoid contact with skin, eyes and clothing. Fine dust dispersed in air may ignite. Wear 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: Use approved industrial vacuum cleaner for removal. Wear personal protective equipment. Dispose of promptly.

7. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Avoid contact with skin, eyes and clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Provide appropriate exhaust ventilation at places where dust is formed. Remove all sources of ignition. Take precautionary measures against static discharges.

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are proximal to the work-station location.

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

Color:	White	Physical state:	Powder
Odour:	Slight	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):	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: None under normal use. Thermal decomposition can lead to release of irritating gases and vapours. Heavy metal compounds. Carbon oxides.

Materials to avoid: Strong oxidizing agents.

Conditions to avoid: Avoid dust formation.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Sensitization: May cause sensitization of susceptible persons by skin contact.

Carcinogenic effects: Cadmium and cadmium compounds (as respirable dust/aerosols) have proven to be carcinogenic.

Target Organ Effects: Kidney. Liver. Barium compound: Heart, gastrointestinal tract.

Component Information

Component information, if any, is listed below

Bisphenol A

NIOSH - LD50s and LC50s: = 2400 mg/kg Oral LD50 Mouse
= 3 mL/kg Dermal LD50 Rabbit
= 3250 mg/kg Oral LD50 Rat

Cadmium compound

ACGIH - Carcinogens: A2 - Suspected Human Carcinogen (as Cd)
OSHA - Specifically Regulated Chemicals: 2.5 ug/m³ action level (as Cd); 5 ug/m³ TWA (as Cd)
OSHA - Select Carcinogens: Present
IARC - Group 1: Monograph 58, 1993 (Evaluated as a group)

12. ECOLOGICAL INFORMATION

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:

UN/ID No: UN3077

Proper shipping name: Environmentally hazardous substance, solid, n.o.s (Cadmium compounds)

U.S. DOT - Hazard Class: 9 Marine pollutant

Packing group: III

Other shipping information: This material meets the definition of a marine pollutant. Applies to containers for shipments in bulk or via water transportation.

TDG (Canada):

Proper shipping name: Environmentally hazardous substance, solid, n.o.s (Cadmium compounds)

Hazard class: 9

Packing group: III

REGULATORY INFORMATION

U.S. Regulations:

Not subject to TSCA 12(b) Export Notification

Cadmium compounds, as Cd (10 - 20%)

SARA 313: form R reporting required for 0.1% de minimis concentration; Chemical Category N078

Cadmium compound (50 - 60%)

SARA 313: 0.1 percent de minimis concentration (Chemical Category N078)

Barium compounds, as Ba (5 - 10%)

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

Barium Compound (30 - 40%)

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

Bisphenol A (5 - 10%)

SARA 313: 1.0 percent 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.

Bisphenol A (5 - 10%)

NJRTK: sn 2388

PARTK: Listed

Barium Compound (30 - 40%)

NJRTK: 2146 (1.0%)

PARTK: Listed

Cadmium compound (50 - 60%)

NJRTK: 2199 (0.1%)

PARTK: Listed

Cal Prop65: carcinogen; developmental toxicity.

Polyol (10 - 20%)

PARTK: Listed

Canadian WHMIS

WHMIS hazard class: D2B Toxic materials. D2A Very toxic materials.

Components

Bisphenol A (5 - 10%)

Cadmium compound (50 - 60%)

WHMIS Ingredient Disclosure:

1%

1%

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): Listed.
Korea (KECL): Listed.
China (IECS): 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