


<b>Section 1 Chemical Product and Company Identification</b>	
<b>Product Name</b>	<b>Therm-Chek® PD 653</b>
<b>Manufacturer</b>	Ferro Corporation, Polymer Additives Division Walton Hills Operation 7050 Krick Road Walton Hills, Ohio 44146-4494 USA
<b>Chemical Name</b>	Barium, Zinc Complex Mixture
<b>Chemical Family</b>	Polymer Additive
<b>Synonym</b>	Not available.
<b>CAS#</b>	Mixture
<b>Emergency Phone Numbers</b>	
CHEMTREC: 1-800-424-9300	
24 Hour Information: 1-216-641-5324	
Plant-Week Days Only: 1-216-750-6708	
Issued on 6/3/2002.	

<b>Section 2 Composition and Information on Ingredients</b>			
INGREDIENTS	CAS #	% Weight	OSHA (PEL) ACGIH (TLV)
1) Barium, soluble compounds (as Ba)		1-5	TWA: 0.5 (mg/m <sup>3</sup> ) from ACGIH (TLV) [United States]
2) Zinc compounds (as Zn)		1-5	Not available.
The specific chemical identities are being withheld as a trade secret (29CFR1910.1200).			

<b>Section 3 Hazards Identification</b>		
<b>Emergency Overview</b>	<b>Color :</b> Amber.	<b>NFPA</b> 
<b>CAUTION!</b>	<b>Physical state :</b> Liquid. (Clear sparkling liquid.)	
	<b>Odor :</b> Mild.	
MAY CAUSE EYE AND SKIN IRRITATION.		
<b>Potential Health Effects</b>		
<b>Acute</b>	This product may irritate eyes and skin upon contact.	
<b>Chronic</b>	Repeated skin exposure can produce dermatitis.	

<b>Section 4 First Aid Measures</b>	
<b>Eye</b>	Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.
<b>Skin</b>	Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. If irritation persists, seek medical attention.
<b>Inhalation</b>	Allow the victim to rest in a well ventilated area. Oxygen may be administered if breathing is difficult. Seek medical attention.
<b>Ingestion</b>	Do not induce vomiting. Seek immediate medical attention.

<b>Section 5 Fire and Explosion Data</b>	
<b>Flash Point</b>	CLOSED CUP: 98°C (208.4°F). (Pensky-Martens.)
<b>Flammability</b>	Non-flammable.
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet. Fire fighters should wear proper protective equipment. A self contained breathing apparatus should be used to avoid inhalation of the product.
<b>Combustion Products</b>	Some metallic oxides (Ba, Zn), carbon oxides (CO, CO <sub>2</sub> ).
<b>Fire Hazards</b>	No additional remark.

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**Section 6 Accidental Release Measures**

<b>Small Spill</b>	Absorb with an inert material and place in an appropriate waste disposal container.
<b>Large Spill</b>	Wear suitable protective clothing, gloves and eye/face protection. Prevent entry into sewers, basements or confined areas. Absorb with DRY earth, sand or other non-combustible material. Recycle to process, if possible.
<b>Personal Protection</b>	
<b>Small Spill</b>	Safety glasses. Gloves.
<b>Large Spill</b>	Splash goggles. Full suit. Boots. Gloves. Wear appropriate respirator when ventilation is inadequate.

**Section 7 Handling and Storage**

<b>Precaution</b>	Wear suitable gloves and eye/face protection. Avoid breathing vapors or spray mists. May react in presence of moisture.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Store away from incompatible materials.

**Section 8 Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
<b>Personal Protection</b>	Safety glasses. Gloves.
<b>Exposure Limits</b>	See Section 2

**Section 9 Physical and Chemical Properties**

<b>Physical state</b>	Liquid. (Clear sparkling liquid.)	<b>Odor</b>	Mild.
<b>pH (1% soln/water)</b>	Not applicable.	<b>Color</b>	Amber.
<b>Boiling Point</b>	Not available.	<b>Specific Gravity</b>	0.9832 (Water = 1)
<b>Vapor Pressure</b>	Not available.	<b>Vapor Density</b>	Not available.
<b>Volatility</b>	Not available.	<b>Viscosity</b>	Not available.
<b>Evaporation rate</b>	<1 compared to Butyl acetate.	<b>Solubility</b>	Insoluble in cold water, hot water.

**Section 10 Stability and Reactivity Data**

<b>Instability</b>	The product is stable.	<b>Will material polymerize?</b>	Will not occur.
<b>Incompatibles</b>	Reactive with oxidizing agents, acids. Avoid getting product wet. Product can be hydrolyzed by moisture with the production of aliphatic alcohol, phenol, and phosphorous acid.		
<b>Corrosivity</b>	Not considered to be corrosive for metals and glass according to our data base.		

**Section 11 Toxicological Information**

<b>Routes of Entry</b>	Skin contact. Eye contact.
<b>Toxicity to Animals</b>	No toxicological information is available on the product. Data obtained on components are summarized below.
<b>Acute Effects</b>	This product may irritate eyes and skin upon contact.
<b>Chronic Effects</b>	Repeated skin exposure can produce dermatitis.

**Section 12 Ecological Information**

<b>Ecotoxicity</b>	Not available.
<b>Biodegradation</b>	Not available.

**Section 13 Disposal Considerations**

**Waste Disposal** Dispose of according to all federal, state and local applicable regulations. This material when discarded is a hazardous waste as defined by RCRA 40 CFR 261. U.S. EPA waste description: D005.

**Section 14 Transport Information**

**DOT Classification** Not a DOT controlled material (United States).  
**Reportable Quantity** CERCLA: Hazardous substances:: No products were found.  
**Marine Pollutant** Not applicable.  
**Special Provisions for Transport** No additional remark.

**Canada TDG Classification** Not controlled under TDG (Canada).  
**WHMIS** CLASS D-2B: Material causing other toxic effects.

**Section 15 Other Regulatory Information**

**State Regulations** State Right-to-Know:  
 Not listed for the following: CA, FL, MI, MN, MA, NJ, PA, RI.  
 California Prop. 65:: No products were found.

**Reportable Quantity** CERCLA: Hazardous substances:: No products were found.

**SARA 313** SARA 313 toxic chemical notification and release reporting: Barium, soluble compounds (as Ba) 3%; Zinc compounds (as Zn) 3%; Barium Compound 5.5%; Zinc Compound 5.5%

**HMIS (U.S.A.)**

Health Hazard	1	Fire Hazard	0	Reactivity	0	Personal Protection	B
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**TSCA 8(b) inventory** All the ingredients are on the TSCA list.  
**CEPA** All the ingredients are on the DSL list.  
**EINECS Status** All the ingredients are on the EINECS list.

**Section 16 Other Information**

Issued on 6/3/2002.

M\_U WH Therm-Chek ®

**Notice to Reader**

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.

**Instructions to the customer/purchaser.**

This MSDS contains important environmental, safety and health information for your employees who will be using this product. Please give this information to them. If you resell this product, give a copy of this MSDS to the buyer.