**Material Safety Data Sheet** 

NFPA		OSHA HCS Ris	sk Phrases			Personal Protective
	USITA TUS RISK FIII dSES					Equipment
0	CLASS: Irritating substance. CLASS: Combustible liquid having a flash point between 37.8°C (100°F) and 93.3°C (200°F).					
Section 1	Chemical Product an	d Company Ide	ntification			
Common Name Trade Name	Therm-Chek® 3	344				
Manufacturer	Ferro Corporation, Polymer Additives Division Walton Hills Operation 7050 Krick Road Walton Hills, Ohio 44146-4494 USA				Emergency P	<u>Phone Numbers</u> C: 1-800-424-9300
Chemical Name	e Zinc Complex Mixture			2	4 Hour Info	rmation: 1-216-641-5324
Chemical Fami	ly Polymer Additive		***************************************	q	lant-Week I	Days Only: 1-216-750-6708
Synonym	Not available.				Idili- WCCK I	Days Only. 1-210-750-6708
CAS#	Mixture					
Section 2	Composition and In	formation on In	gredients			
INGREDIENT		CAS#	% Weight		ACGIH (T	LV)
1) Mineral Spir	rits	8052-41-3	15-20			SHA (PEL) [United States] CGIH (TLV) [United States]
2) Zinc compo	unds (as Zn)	7440-66-6	<1	Not available.		
The specific che	emical identities are being v	withheld as a trade	secret (29CF	R1910.1200).		
Section 3	Hazards Identificati	on				ON THE RESERVE TO SERVE THE SERVE TH
Emergency Ove WARNING!		Solver JID AND VAPOR		iquid. (Hazy liqui JSE RESPIRATO		T, EYE AND SKIN IRRITATION.
Potential Healt Acute				n contact. May	cause re	spiratrory tract irritation. Avoid
Chronic		mist. Can cause	e CNS depre	ession.		Spirationy tract inflation. Avoid
Cnronic	Repeated skin exp	oosure can prod	<u>-</u>			d exposure to the substance can
Section 4		oosure can prod	<u>-</u>			
	produce nervous s	oosure can prod ystem effects. f water for at lea	uce dermati	tis. Repeated o	r prolonge	
Section 4	produce nervous s  First Aid Measures  Flush with plenty of persists, seek medical	oosure can prod ystem effects.  f water for at leadical attention. ghly wash the co	uce dermati	tis. Repeated o	r prolonge	d exposure to the substance can
Section 4 Eye	First Aid Measures Flush with plenty of persists, seek medical descriptions of the persists, seek medical descriptions of the persists, seek medical descriptions of the persists of the persi	oosure can prod ystem effects.  If water for at lead lical attention.  If wash the collical attention.	uce dermati st 15 minute ontaminated	tis. Repeated o	r prolonge ifting the up	d exposure to the substance can
Section 4 Eye Skin	First Aid Measures Flush with plenty of persists, seek medical persists, seek medical Allow the victim to	oosure can produystem effects.  If water for at leadical attention.  If wash the collical attention.  If wash the collical attention.	uce dermati st 15 minute ontaminated ntilated area	tis. Repeated on the second sec	r prolonge ifting the up	pper and lower eyelids. If irritation and non-abrasive soap. If irritation
Section 4 Eye Skin Inhalation	First Aid Measures Flush with plenty of persists, seek medical attention.  Po not induce vor	oosure can produystem effects.  If water for at leadical attention.  If wash the collical attention.	uce dermati st 15 minute ontaminated ntilated area	tis. Repeated on the second sec	r prolonge ifting the up	pper and lower eyelids. If irritation and non-abrasive soap. If irritation
Section 4 Eye Skin Inhalation Ingestion	First Aid Measures Flush with plenty of persists, seek median definition of the persists, seek medians, seek medians, seek medians, seek medians, seek medians, seek medians, and the persists of the persists	oosure can produystem effects.  If water for at leadical attention.  If wash the collical attention.	st 15 minute ontaminated ntilated area	tis. Repeated on the second sec	or prolonge  Ifting the up  og water ar  oe adminis	pper and lower eyelids. If irritation and non-abrasive soap. If irritation
Section 4 Eye Skin Inhalation Ingestion Section 5 Flammability	First Aid Measures Flush with plenty of persists, seek medical attention.  Do not induce vor Fire and Explosion	oosure can produystem effects.  If water for at leadical attention.  If wash the collical attention.	st 15 minute ontaminated ntilated area	tis. Repeated on the second se	ifting the upon the administration of the control o	opper and lower eyelids. If irritation and non-abrasive soap. If irritation tered if breathing is difficult. Seek
Section 4 Eye Skin Inhalation Ingestion Section 5 Flammability	First Aid Measures Flush with plenty of persists, seek medical attention.  Do not induce vor Fire and Explosion Flammable.  Flammable liquid, if SMALL FIRE: Use	oosure can produystem effects.  If water for at leadical attention.  Ighly wash the collical attention.  Irest in a well veniting. Seek imm  Data  Insoluble in water of DRY chemical place water spray	st 15 minute ontaminated ntilated area rediate medi	tis. Repeated on the second se	ifting the upon a water are per administration of the control of t	opper and lower eyelids. If irritation and non-abrasive soap. If irritation tered if breathing is difficult. Seek
Section 4 Eye Skin Inhalation Ingestion Section 5 Flammability Auto-Ignition Temper	First Aid Measures Flush with plenty of persists, seek medical attention.  Do not induce vor Fire and Explosion Flammable.  Flammable liquid, if SMALL FIRE: Use ins LARGE FIRE: Use	oosure can produystem effects.  If water for at leadical attention.  If wash the collical attention.	st 15 minute ontaminated ntilated area rediate mediate. y or fog. Creathing app	tis. Repeated on the second se	ifting the upon a water are per administration of the control of t	oper and lower eyelids. If irritation and non-abrasive soap. If irritation tered if breathing is difficult. Seek
Section 4 Eye Skin Inhalation Ingestion Section 5 Flammability Auto-Ignition Temper Fire Fighting Media and Instruction Combustion	First Aid Measures Flush with plenty of persists, seek medical attention.  Do not induce vom  Fire and Explosion Flammable.  Flammable liquid, if SMALL FIRE: Use approved/certified.	oosure can produystem effects.  If water for at leadical attention.  If wash the collical attention.	st 15 minute ontaminated ntilated area rediate mediate. y or fog. Creathing app	tis. Repeated on the second se	ifting the upon a water are per administration of the control of t	oper and lower eyelids. If irritation and non-abrasive soap. If irritation tered if breathing is difficult. Seek

Therm-Chek®	344 Ferro Corp	oration, Polymer Additives Division	n Page Number: 2	
Fire Hazards	Explosive in the form of vapor when exposed to heat or flame. Vapor may travel considerable distance to source of ignition and flash back. When heated to decomposition it emits toxic fumes (zinc oxide).			
Section 6	Accidental Release Measures			
Small Spill	Absorb with an inert material and plac	e in an appropriate was	te disposal container.	
Large Spill	away from spill area. Wear suitable p fumes, vapor or spray. Do not ente Recycle to process, if possible. Do no	rotective clothing, glove or storage areas and co ot allow product to reach	sparks and flame. Keep unnecessary people is and eye/face protection. Do not breathe gas, onfined spaces unless adequately ventilated a sewage system, surface or ground water, skim n. Absorb with DRY earth, sand or other	
Personal Protec Small Spill	tion Safety glasses. Gloves. Wear approp	oriate respirator when v	entilation is inadequate.	
Large Spill	Splash goggles. Full suit. Boots. Glo	oves. Wear appropriate	respirator when ventilation is inadequate.	
Section 7	Handling and Storage			
Precaution			Ground all equipment containing material. Do loves and eye/face protection. May react in	
Storage			in a cool, well-ventilated area. Keep container ible sources of ignition (spark or flame). Store	
Section 8	Exposure Controls/Personal Protection	n		
Engineering Co		d limit value. Ensure ti	s to keep the airborne concentrations of vapors nat eyewash stations and safety showers are	
Personal Protec	tion Safety glasses. Gloves. Wear a	ppropriate respirator wh	nen ventilation is inadequate.	
Exposure Limit	s See Section 2			
Section 9	Physical and Chemical Properties			
Physical state	Liquid. (Hazy liquid.)	Odor	Solvent-like.	
pH (1% soln/water	r) Not applicable.	Color	Amber.	
Boiling Point	The lowest known value is 167.78°C (334°F) (Mineral Spirits).	Specific Gravity	0.9303 (Water = 1)	
Vapor Pressure	The highest known value is 0.3 kPa (@ 20°C) (Mineral Spirits).	Vapor Density	The highest known value is 4.9 (Air = 1) (Mineral Spirits).	
Volatility	15.5% (w/w).	Viscosity	Not available.	
Evaporation ra	te <1 compared to Butyl acetate.	Solubility	Insoluble in cold water, hot water.	
Section 10	Stability and Reactivity Data			
Instability	The product is stable.	Will material J	oolymerize? Will not occur.	
Incompatibiles	Reactive with oxidizing agents, acid moisture with the production of alipha		g product wet. Product can be hydrolyzed by phosphorous acid.	
Corrosivity	Not considered to be corrosive for me	etals and glass according	ng to our data base.	
Section 11	Toxicological Information			
Routes of Entr		n.		
Toxicity to Animals	LD50: Not available. LC50: Not available.	LD50: Not available.		
Acute Effects	This product may irritate eyes and breathing vapor or mist. Can cause		May cause respiratrory tract irritation. Avoid	
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	Ferro Corporation, Polymer A	Page Number: 3	
		Repeated or prolonged exp	osure to the substance can
Ecological Information	tion		
Not available.			
Not available.			
Not available.			
Disposal Consider	ations		
Transport Informat	ion .		
- Bulk Con	nbustible liquid, n.o.s. (naphtha), N	A1993, III.	
- Non-Bulk Not	regulated by DOT.		
ity CERCLA: H	lazardous substances.: No prod	ducts were found.	
			r) and 93.3°C (200°F).
togram	<b>7</b>	DG(Canada) Pictogram	
t	Repeated skin exproduce nervous s  Ecological Informa  Not available.  Not available.  Not available.  Disposal Consider  Recycle, if possible product is conside  Transport Informat  - Bulk Con  - Non-Bulk Not  tity CERCLA: H	Repeated skin exposure can produce dermatitis produce nervous system effects.  Ecological Information  Not available.  Not available.  Not available.  Disposal Considerations  Recycle, if possible. Dispose of according to all fe product is considered a RCRA hazardous waste in transport Information  - Bulk Combustible liquid, n.o.s. (naphtha), Non-Bulk Not regulated by DOT.  tity CERCLA: Hazardous substances.: No product is CLASS B-3: Combustible liquid with a flast CLASS D-2B: Material causing other toxic	Repeated skin exposure can produce dermatitis. Repeated or prolonged exp produce nervous system effects.  Ecological Information  Not available.  Not available.  Not available.  Disposal Considerations  Recycle, if possible. Dispose of according to all federal, state and local applica product is considered a RCRA hazardous waste if disposed as recieved. Ignita  Transport Information  - Bulk Combustible liquid, n.o.s. (naphtha), NA1993, III.  - Non-Bulk Not regulated by DOT.  tity CERCLA: Hazardous substances.: No products were found.  CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F CLASS D-2B: Material causing other toxic effects (TOXIC).

Section 15	Other Regulatory Information		
USA Regulatory Lists	Pennsylvania RTK: Mineral Spirits Florida: Mineral Spirits Minnesota: Mineral Spirits Massachusetts RTK: Mineral Spirits New Jersey: Mineral Spirits New Jersey TSRN Number: 800940-5081-P		
SARA 313	Total Zinc compounds: 1 - 10%		
HMIS (U.S.A.)	Health Hazard 1 Fire Hazard 2 Reactivity Personal Protection C		
TSCA 8(b) inventory CEPA EINECS Status	TSCA (Toxic Substance Control Act): This product or its components are listed on the TSCA Inventory. Canadian environmental protection act (CEPA): This product or its components appear on the Domestic Substances List (DSL) EINECS: This product or its components appear on the European Inventory of Existing Commercial Chemical Substances.		

Section 16	Other Information		
References	ces Not available.		
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		MSDS PAD WH V3.1.1 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.