

# HB CHEMICAL

## MATERIAL SAFETY DATA SHEET

MSDS #: 1603	Issue Date: February 12, 2010	Revision #: 1	Revision Date: February 12, 2010
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### 1. Product & Company Information

<b>Trade name:</b>  CTR(TMTD)-75	<b>Chemical Description:</b>  A Chem Technologies proprietary polymer bound dispersion of TMTD.	<b>Address:</b> <b>Chem Technologies, Ltd.</b> 14875 Bonner Drive Middlefield, OH 44062 440-632-9311 (ph) 440-632-9578 (fax)	<b>Emergency Contact:</b>  <i>Chemtrec:</i> 1-800-424-9300 (in US) 1-703-527-3887 (Non-US)
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### 2. Hazard Summary & Hazardous Ingredients

**Hazard Overview:** This product has not been tested as supplied to our customer. Based on normal industrial hygiene practices, this product is not expected to cause significant health hazards. The hazards listed below are based on the individual components in their original state. Once in a polymeric matrix, dust related hazards are precluded however fume/vapor related hazards may exist at rubber processing temperatures. The degree of ventilation and the need for personal protective equipment for employee protection should be assessed by the customer.

**Physical Hazards (None if Blank):** If the final product is in pellet form, grounding/proper bonding procedures should be implemented to avoid hazards associated with possible static charges during handling.  
Avoid dispersion of dust in air to reduce potential for dust ignition/explosions.

**Health Hazards (None if Blank):** Contact with heated material may cause thermal burns.

Antabuse effect - may cause alcohol intolerance. Eye, skin, respiratory irritant. Skin sensitizer.  
May cause skin irritation.  
Particulates may cause mechanical irritation.

**HMIS Ratings:** Hazard Rating Scale: 0 = minimal, 1 = slight, 2 = moderate, 3 = serious, 4 = severe

<b>Health</b>	<b>Flammability</b>	<b>Physical Hazard</b>	<b>PPE</b>
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An asterisk in the HMIS Health code indicates a chronic health hazard. See section 3. The PPE recommendation is based on the PPE for the individual raw materials contained in this blend. It is our recommendation that PPE defined above be used when handling this product according to Section 8 of this MSDS. Individual plant environmental and handling conditions may vary; plant safety personnel should determine PPE specific to actual plant conditions.

**Exposure Limits (None if Blank):**

<u>Chemical Name:</u>	<u>CAS No.:</u>	<u>ACGIH:</u>	<u>OSHA:</u>
Oil mist	64742-52-5	5 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> STEL 2500 mg/m <sup>3</sup> IDLH	5 mg.m <sup>3</sup> TWA
Thiram	137-26-8	5 mg/m <sup>3</sup> TWA	5 mg/m <sup>3</sup> TWA, 100 mg/m <sup>3</sup> IDLH

### 3. Health and Toxicology Information

**Acute Overexposure (None if Blank):**

***Irritation:***

<i>Eye</i>	<i>Skin</i>	<i>Irritation</i>
x	x	x

Antabuse effect - may cause alcohol intolerance.

***Chronic Overexposure (None if Blank):***

***Skin Sensitization***      ***Respiratory Sensitization***

x

May cause skin sensitization.

Repeated skin contact may cause dermatitis.

***Primary Route(s) of Entry:*** Eyes, Skin, Inhalation

***Medical Condition(s) Prone to Aggravation:*** Eye, skin, respiratory tract ailments.

***Toxicity Information (None if Blank):*** LD50 (oral, rat) in mg/kg:      560

***Carcinogenic Information (None if Blank):***

#### ***4. First Aid***

***Eye:*** Rinse with plenty of water. Seek medical attention if irritation persists.

***Skin:*** Wash off immediately with plenty of soap and water. Seek medical advice in case of irritation.

***Ingestion:*** Seek medical attention.

***Inhalation:*** Remove to fresh air. Seek medical advice if irritation persists.

First Aid Inhalation

#### ***5. Fire-Fighting Measures***

***Extinguishing Media:***

CO2, dry chemical, foam, water spray

Dry chemical, carbon dioxide, water fog and foam.

Water spray

Water, dry powder or regular foam.

***Unusual Fire and Explosion Hazards (None if Blank):***

***Fire Fighting Protective Equipment:***

A self contained breathing apparatus (SCBA) in positive pressure mode and full fire fighting protective gear should be worn for fighting fires.

***Special Fire-Fighting Procedures (None if Blank):***

***Flash Point based on the lowest known value of the components of this blend:*** 185°C

#### ***6. Accidental Release Measures***

***Spill Clean-up:*** Sweep up by mechanical means.

Shut off ignition source.

***Waste Disposal:*** Put into proper containers and dispose of in accordance with all local, state and federal regulations.

#### ***7. Handling and Storage***

***Storage Conditions:*** Store in a cool, dry environment in original sealed packaging. Avoid exposure to direct sunlight. Avoid flames, sparks, hot surfaces, static charges and other sources of ignition.

Store away from acids and oxidizers: x

Store away from high temperatures:

MaxOfStor Temp

Store below 120°C.

**Handling:** Persons handling equipment should wear protective equipment specified in Section 8. Good housekeeping and hygienic practices should be observed.

## 8. Exposure Controls and Personal Protection

<b>Eye:</b> Safety glasses with side shields	<b>Gloves:</b> Rubber or plastic gloves.	<b>Respiratory:</b> Dust mask.	<b>Clothing:</b> Long sleeved shirt and long pants.
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**Special Plant Equipment:** Local exhaust ventilation, eye bath, safety shower.

**Hygienic Practices:** Wash after handling product. After work cloths be changed and washed before reuse. Do not smoke, eat or use alcohol while handling product.

*The elastomeric form of this product precludes dust exposure and associated hazards. Fumes and vapors generated at rubber processing temperatures may cause eye, skin and respiratory tract irritation. Adequate ventilation and appropriate PPE should be provided. With inadequate protection, exposure to fumes and vapors may cause nausea, dizziness and/or headaches.*

## 9. Physical and Chemical Properties

<u>Physical State</u>	<u>Color</u>	<u>Odor</u>	<u>Specific Gravity</u>
		Characteristic	
<u>Melt Point (lowest known)</u> 154 °C	<u>H<sub>2</sub>O Solubility</u> Insoluble Insoluble		
40°C		Insoluble Negligible	

## 10. Stability and Reactivity

**Stability & Polymerization:** The finished product is stable. Hazardous polymerization will not occur. Ground all equipment.

Avoid contact with heat, sparks, flame and all sources of ignition **Incompatibility:**

Strong Oxidizers: x

Strong Acids: x

Avoid sources of ignition.

Extensive heating at temperatures above 250C can results in decomposition.

Strong bases

**Hazardous Decomposition Products:**

Carbon Oxides: x      Nitrogen Oxides: x      Sulfur Oxides: x

**Other Hazardous Decomposition Products (None if Blank):**

Acetic acid

Smoke, fumes and unburned hydrocarbons and trace oxides.

**Special Sensitivity (None if Blank):**

## 11. Ecological Information

**Clean Water & Air Regulations (None if Blank):**

9-

octadecenoic acid

Oil mist

Thiram

KEY: CW-A) Clean Water Act Hazardous Substances, 40 CFR 116.4, 117.3, CW-B) Clean Water Act Priority Pollutants, 40 CFR Sec. 40, CW-C) Clean Water Act Toxic Pollutants, 40 CFR 401.115 (F19), CA-A) Clean Air Act Hazardous Air Pollutants, 40 CFR Part 61, CA-B) Clean Air Act High-Risk Pollutants, 40 CFR Sec. 63.74, CA-C) Clean Air Act ARP Toxic Substances, 40 CFR Sec. 68.130.

## 12. Disposal Information

**Disposal Method:** Dispose of product or empty containers in accordance with local, state and federal regulations.

**Hazardous Waste Regulations (None if Blank):**

Thiram

HZ-C (U244)

**KEY:** HZ-A) RCRA Acute Hazardous Wastes (P-List), 40 CFR Sec. 261.3, HZ-B) RCRA Characteristic Toxic Wastes (D-List), 40 CFR Sec. 261.24, HZ-C) RCRA Toxic Hazardous Wastes (U-list), 40 CFR Sec. 261.33, HZ-D) RCRA Appendix VII F/K List Hazardous Constituents, 40 CFR Part 261 App.VII, HZ-E) RCRA Appendix VIII Hazardous Constituents, 40 CFR Part 261 App VIII.

**Superfund Reportable Quantity Chemicals, 40 CFR Sec. 302.4 (F12) (None if Blank):**

Thiram (RQ 10 lb)

**13. Transportation Information**

**Ground DOT/TDG (None if Blank):**

RQ, Other regulated substances, solid, n.o.s. (thiram), 9, UN3077, PG III, net \_\_\_\_ lbs.

24 hour emergency contact: (800) 424-9300 **Air IATA (None if Blank):**

Class 9, PG III, UN3077

**14. Regulatory Information**

**Inventory Status (None if Blank):**

US TSCA:

All ingredients listed.

Canadian DSL/NDSL:

All ingredients listed.

SARA Title III:

Thiram

S-B

**KEY:** S-A) SARA Title III Sec. 302 Extremely Hazardous Substances, 40 CFR Part 355, S-B) SARA Title III Sec. 313 Toxic Chemicals, 40 CFR Sec. 37, S-C) SARA Title III Sec. 313 Chemicals of Special Concern, 40 CFR Sec. 373.28:

SARA Title III, Section 313 (also known as the Emergency Planning and Community Right to Know Act, or EPCRA) requires certain suppliers of mixtures or trade name products to notify their customers when such mixtures or trade name products contain chemicals listed in Section 313. Listed below are Section 313 chemicals contained in this product (none if blank):

Chemical	CAS Number	Amount
Thiram	137-26-8	

**TSCA Preliminary Assessment Information Reporting, 40 CFR Sec. 712 (None if Blank):**

**State Regulations (None if Blank):**

State	a)	b)	c)	d)	f)	g)	h)	i)	j)	k)	l)	F36	a)	b)	c)	F40a	F41	a)
Chemical	F23	F24	F25	F27	F28	F29	F30	F31	F32	F33	F34	FL	F37	F38	F39	MA	MI	F42
	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA		IL	IL	IL			NJ
Thiram	Ca	Cb			Cf							FL			Ic	MA	MI	Na

9-octadecenoic acid

Oil mist

Ca

MA

**KEY:** CA: Ca) Director's List of Hazardous Substances, Cb) OSHA Workplace Airborne Contaminants, Cc) OSHA workplace Carcinogens, Cd) HWCL Extremely Hazardous Wastes, Ce) HWCL Hazardous Wastes, Cf) State Superfund Hazardous Substance, Cg) ARP Regulated Substance, Ch) Proposition 65 Carcinogens, Ci) Proposition 65 Reproductive Toxins, Cj) Air Toxics Requiring Quantification, Ck) CA Air Toxics Requiring Notification, **IL:** Ia) EPA (Water Sections) Priority Pollutants, Ib) EPA (Water Sections) Toxic Pollutants, Ic) Hazardous Waste, **MA:** MA) Substance List, **MI:** MI) Critical Materials Register, **NJ:** Na) Right-to-Know Hazardous Substances, Nb) Workplace Hazardous Substances, **NY:** NY) Hazardous Substance Bulk storage List, **OH:** Oa) Emergency Response Law Toxic Chemicals, Ob) Hazardous Wastes, **PA:** Pa) Hazardous Substances List, **TX:** Tb) Hazardous Wastes List.

**IMDS Listing (None if Blank):**

Substance	CAS#	Class	Source	Hazard	Total Percent
Thioperoxydicarbonic diamide [H2NCS]2S2, tetramethyl-	137-26-8	D	Japan: Waste Disposal and Cleaning Law	M3, Sens	

## ***15. Other Information***

### ***Abbreviations:***

ND – Not Determined, NE – Not Established, PPE – Personal Protective Equipment

***References:*** Code of Federal Regulations, Transportation, 49 CFR Parts 100 to 185, October 2000, NIOSH Pocket Guide to Chemical Hazards, June 1997, HMIS Implementation Manual, 2nd Edition, ChemCheck Handbook, Specialty Technical Publishers, IARC WEB site, NTP WEB site

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