

Material Safety Data Sheet

Sovchem CTP

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Sovereign Chemical Company 1225 West Market St. Akron, OH 44313 USA	Emergency Contact : Chemtrec: 1-800-424-9300 (continental USA) (1)703-527-3887 (outside continental USA)
Trade Name(s): Sovchem CTP Oil Powder/Powder/Granule	MSDS Number: 1748
Chemical Name: N-cyclohexylthiophthalimide	Synonyms: PVI, CPTI, CPT
Prepared By: Sovereign Chemical Company	Date of Issue: October 17, 2008 (supersedes March 18, 2004) Revision Number: 1 Change(s): 3 year update

2. INGREDIENTS

<u>Component</u>	<u>CAS #</u>	<u>Percent</u>	<u>ACGIH (TLV/WA)</u>	<u>OSHA (PEL/TWA)</u>
Cyclohexylthiophthalimide	17796-82-6	97 minimum	NE	NE

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Pale-cream crystalline powder or granule. Use appropriate personal protective equipment. During fire situations, irritating and toxic gases may be generated. Keep from entering storm or sanitary sewers, ground water, or soil. Avoid accumulation of dusts. Dust mixtures with air can be explosive.

HMIS Rating: Health -2, Flammability - 1, Reactivity - 0, Personal Protection Equipment - E* (safety glasses, gloves, dust mask)

*This is recommended personal protection equipment, final personal protection equipment should be determined by the plant safety department based on the actual conditions under which the product is used.

Potential Health Effects:

Eye: Causes eye irritation.

Skin Contact: May cause allergic skin reaction.

Ingestion: May be irritating to the mucous membranes of the gastro-intestinal tract.

Inhalation: May be irritating to the mucous membranes of the respiratory tract. Vapors may cause nausea. Avoid breathing dust. May cause vomiting.

Chronic & Carcinogenicity: The product is not known to be carcinogenic.

4. FIRST AID MEASURES

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

Eye: Rinse immediately with plenty of water. Get medical attention.

Ingestion: If swallowed, induce vomiting and seek medical care immediately. Doctor Warning: material is water insoluble. It is soluble in tetrachloromethane, cyclohexane and toluene. If swallowed, medical activated charcoal may be used as an absorbent.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: 204°C **LEL:** 13.5% dust in air **UEL:** ND **Auto Ignition Temperature:** 298°C

Use foam to extinguish fires. Sand and CO₂ are not suitable extinguishing media. A self contained breathing apparatus (SCBA) operating in the positive pressure mode and full fire fighting protective clothing should be worn for combating fires. During a fire, the product can form sulfur dioxide, carbon monoxide, phthalimide and nitrogen oxides. Thoroughly decontaminate equipment after use. Avoid accumulation of dusts. Dust mixtures with air can be explosive.

6. ACCIDENTAL RELEASE MEASURES

Take up any spilled product by mechanical means (avoid dust formation) and place into sealed containers for proper disposal. Individuals involved in the cleanup should wear appropriate personal protective equipment. See Section 8. Unnecessary personnel should be kept clear of the area. Keep from entering storm or sanitary sewers, ground water, or soil. Dispose of following all local, state and federal laws. Other information as required.

7. HANDLING AND STORAGE

Storage Conditions: Do not store at high temperatures or near acids, oxidants or foodstuffs. Store in closed containers in a dry environment.

Handling: Good housekeeping and engineering practices should be employed to prevent the generation and accumulation of dusts. Wet mopping or vacuuming with a unit that contains a HEPA filter is recommended to clean up any dusts generated during processing or handling. Avoid accumulation of dusts. Dust mixtures with air can be explosive. Eliminate sources of ignition. Wear proper protective equipment (see section 8). Plant environment should include controls and equipment specified in Section 8.

8. EXPOSURE CONTROL - PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation should be provided. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A Manual of Recommended Practices" published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust ventilation systems should be designed by a professional engineer.

Respiratory Protection: Dusk mask.

Eye Protection: Chemical protective goggles are recommended where there is a possibility of eye contact with the product. Safety glasses with side shields are recommended for all other operations. An eye wash device should be available in the work area where the product is handled.

Protection Gloves: Neoprene or nitrile gloves should be worn to prevent irritation and possible absorption. Cloth gloves are not recommended. Long sleeved clothing should be worn.

Other Protection Items: Neoprene or nitrile rubber coated apron or other body covering may be required if there is a possibility of regular work clothing becoming contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse. A shower is recommended after handling product. Do not eat or smoke while handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State: Pale cream crystalline oil powder or Granules	Melt Point: 90-94°C
Vapor Density (Air = 1): Not applicable	Octanol/Water Partition Coefficient: 4600
Vapor Pressure: Not applicable	Evaporation Rate BuOAC = 1: Not applicable
Odor: Slight mercaptan	Specific Gravity: 1.33 Bulk Density(powder)y: 420-430 kg/m ³
% Volatile by Volume: Not applicable	Boiling Point: Decomposes
% Solubility (H₂O) : Insoluble	pH: Not applicable
Other: Soluble in tetrachloromethane, toluene, cyclohexane.	

10. STABILITY AND REACTIVITY

Stability /Polymerization: Thermally stable to 120°C. Hazardous polymerization does not occur.

Incompatibility (conditions to avoid): High temperatures and contact with acids and oxidants. If strongly heated, this product may catch fire and give off toxic fumes. Moisture will weaken product bag. Avoid contact with foodstuffs.

Hazardous Decomposition Products: Carbon monoxide, phthalimide, sulfur dioxide and nitrogen oxides.

Special Sensitivity: None

11. TOXICOLOGICAL INFORMATION

CTP primarily irritates the skin. If application is over, the skin redness disappears quickly. It irritates the eye mucous membrane.

Acute Oral Toxicity LD 50 =2600 mg/kg (Rat)

Acute dermal toxicity LD 50 = 5010 mg/kg (Rabbit)

Eye test: degree of injury = 5, harmful, mucous membrane strongly blood rushed, blistered, effluxed.

Skin test: degree of injury = 2, very slightly harmful

Maximum allowable dust concentration in the air is 1 mg/m³.

Sovchem CTP at the 100% level is a primary irritant, sensitizing and fatiguing agents. However, when this product was compounded up to 2 pounds per 100 into rubber was not a primary irritant, a fatiguing agent, or a sensitizing agent and did not have any mutagenic effect. No teratogenic, fetotoxic, or maternally toxic effects were observed in rabbits administered 1.0 or 5.0 mg/kg on days 6 through 18 of gestation.

12. ECOLOGICAL INFORMATION

96-hr EC 50 Algae: 21 mg/l, slightly toxic

48-hr LC 50 Daphnin: 32 mg/l, slightly toxic

96-hr LC 50 Rainbow Trout: 0.4 mg/l, highly toxic

96-hr LC 50 Bluegill: 1.2 mg/l, moderately toxic

The concentration of 20 mg/l in water inhibits the 1st degree of microbiological nitrification to 50% (nitrosomonas) and concentration 105 mg/l inhibits the 2nd degree of nitrification (nitrobacter).

13. DISPOSAL CONSIDERATIONS

Product and empty packaging should be disposed of in an EPA approved incinerator or landfill in accordance with all local, state, and/or federal regulations.

When discarded, **Sovchem CTP** is not a "hazardous material" as defined in 40.CFR 261, "Identification and Listing of Hazardous Waste".

14. TRANSPORTATION INFORMATION

US DOT : Not regulated.

UN Number: UN3335(air only) NONE for other modes of transportation.

ADR/RID: Class 9 Miscellaneous Hazard Goods .

IMDG: Not regulated.

IATA: Aviation regulated Solid, NOS, (N-Cyclohexylthio-phthalimide),9 , UN 3335

Canadian TDG: Not regulated.

15. REGULATORY INFORMATION

RCRA: No reportable or threshold planning quantities.

SARA Title III, Section 313: Not listed.

WHMIS, NRP, IARC, SUBPART Z, Proposition 54 (CA), Clean Air: Not listed.

Canadian DSL: All ingredients are listed.

TSCA: All ingredients all listed on the TSCA inventory.

16. OTHER INFORMATION

NE = Not Established

NA = Not Applicable

ND = Not Determined

Information contained in this MSDS sheet have been gathered from the following documents:

Chemical REG-A-DEX, J.J.Keller, March 2000

WHMIS Compliance Manual, Carswell, April 2000

Transportation of Dangerous Good, J.J.Keller, February 2000

Code of Federal Regulations, Transportation, 49 CFR Parts 100 to 185, October 1998

NIOSH Pocket Guide to Chemical Hazards, June 1997

ACGIH Threshold Limit Values, 1999

HMS Implementation Manual, 2nd Edition

Toxicity and Safe Handling of Rubber Chemicals, BRMA, 3rd Edition

ChemCheck Handbook, Specialty Technical Publishers, March 2000

IARC WEB site

NTP WEB site

IMPORTANT SAFETY NOTICE: The information in the Material Safety Data Sheet relates only to the specific material(s) described herein and does not relate to use in combination with any other material or substance or in any process. We believe that the information contained herein is current as of the date of issue of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of this product are not within the control of Sovereign Chemical Company, it is the user's obligation to determine the conditions of safe use of the product.

Users of this product should study this Material Safety Data Sheet and become aware of the product hazards and safety information before using the product. Users should also notify their employees, agents, and contractors of the information on this Material Safety Data Sheet and any product hazards and safety information in order to provide safe use of this product.