



# SAFETY DATA SHEET

## DREXEL CAPTAN 4L FUNGICIDE

### Section 1: Material Identification

**Product Name:** Drexel Captan 4L Fungicide  
**EPA Reg No.:** 19713-156  
**CAS NO:** 133-06-2  
**Formula:** C<sub>9</sub>H<sub>8</sub>Cl<sub>3</sub>NO<sub>2</sub>S  
**Company:** Drexel Chemical Company  
 1700 Channel Avenue  
 Memphis, TN 38106

**Synonyms:**

**Identifiers:**

**EINECS:** 205-087-0  
**RTECS:** GW5075000  
**DOT label:** UN-3082, Environmentally Hazardous Substance, Liquid, N.O.S., (Captan), 9, PG-III, RQ 10 lbs.

**Emergency Telephone Number:**

CHEMTREC	Drexel Chemical Co.
Tel: 1-800-424-9300	901-774-4370

This product is an EPA FIFRA registered pesticide. Some of the classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Please see **Section 15. REGULATORY INFORMATION** for explanation.

### Section 2: Hazard Identification (As defined by the OSHA Hazard Communication Standard, 29)

<b>GHS Classification</b>	Acute inhalation	Category 4
	Eye damage/irritation	Category 1
	Skin Irritation	Category 2
	Aquatic acute toxicity	Category 1
<b>GHS label elements</b>		
<b>Signal Word</b>	Danger	



**Hazard statements**  
 Harmful if inhaled  
 Causes serious eye damage  
 Causes skin irritation  
 Very toxic to aquatic life

**Precautionary statements**

**Prevention**  
 Avoid breathing mist or vapors. Use only outdoors or in well-ventilated area.  
 Wash exposed skin thoroughly after handling. Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene, Nitrile/butadiene rubber (“nitrile” or “NBR”) or Polyvinyl chloride (“PVC” or “vinyl”).  
 Avoid release to the environment.

**Response**  
**If inhaled:** Remove person to fresh air and keep comfortable for breathing. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.  
**If in eyes:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.  
**If on skin:** Wash with plenty of water while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Destroy contaminated leather items such as shoes, belts, and watchbands. Collect spillage.

**Storage**  
 Store in a cool, dry, well ventilated and secure area designated specifically for pesticides and away from heat sources. Keep in original containers and keep containers closed when not in use. Do not store in excessive heat. Do not store near children, food, foodstuffs, drugs or potable water supplies.

**Disposal**  
 If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities.

**Section 3: Composition Information**

<u>Components</u>	<u>% By Wt.</u>	<u>OSHA PEL:</u>	<u>ACGIH TLV:</u>
Active Ingredient:			
Captan	37.99%	N/Av	5 mg/m <sup>3</sup>
Related derivatives	0.58%	N/Av	N/Av
Inert Ingredients:	61.43%	N/A	N/A



## Section 6: Accidental Release Measures

### Steps to be taken if Material is Released or Spilled:

- Contain spilled material if possible. Small spills: Sweep up with suitable absorbent material. Collect in suitable and properly labeled containers. Large spills: Contact Drexel Chemical Co. for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

### Personal Precautions:

- Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental Precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

## Section 7: Handling and Storage

### KEEP OUT OF REACH OF CHILDREN

- Handling:** **General Handling:** Avoid contact with eyes, skin, and clothing. Wash thoroughly with soap and water after handling. Do not swallow. Avoid breathing vapor. Use with adequate ventilation. Wear coveralls, long-sleeved shirt, rubber boots with socks when handling. Keep away from heat, sparks and flame. See Section 8, Exposure Controls and Personal Protection.
- Storage:** Store in a cool, dry, ventilated and secure area designated specifically for pesticides and away from heat sources. Keep in original containers and keep containers closed when not in use. Do not store in excessive heat. Do not store near children, food, foodstuffs, drugs or potable water supplies.

## Section 8: Exposure Controls/ Personal Protection

**Exposure Limits:** TLV Captan 5 mg/m<sup>3</sup>

### Personal Protection:

**Eye/Face Protection:** Wear safety glasses with side shields or chemical splash goggles to prevent vapors or mists from entering the eyes. If using a full face shield, always use safety glasses or goggles along with the face shield to ensure adequate protection of the eyes.

**Skin Protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.

**Hand protection:** Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene, Nitrile/butadiene rubber ("nitrile" or "NBR") or Polyvinyl chloride ("PVC" or "vinyl").

**Respiratory Protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. When handling in enclosed areas, when large quantities of mists are generated or prolonged exposure is possible in excess of the TLV, use a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

**Ingestion:** Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work

area; wash hands and face before smoking or eating. Avoid getting wash water in eyes.

### **Engineering Controls:**

**Ventilation:** When handling this product proper ventilation is required to maintain exposure below the TLV. Ventilate all transport vehicles prior to unloading. Facilities storing or utilizing this material should be equipped with and eyewash facility and safety shower.

## **Section 9: Physical and Chemical Properties**

<b>Physical State:</b>	Viscous liquid
<b>Color:</b>	Tan
<b>Odor:</b>	Mild
<b>Flash Point:</b>	>200°F
<b>Vapor Pressure (mmHg):</b>	N/A
<b>Boiling Point:</b>	>212°F
<b>Vapor Density (air = 1):</b>	N/Av
<b>Bulk Density (H<sub>2</sub>O = 1):</b>	10.33 lbs. /gal.
<b>Freezing Point:</b>	N/Av
<b>Solubility in water (wt. %):</b>	Dispersible
<b>pH:</b>	4.11 (5% emulsion 23°C)
<b>Viscosity:</b>	800 cps at 23°C

## **Section 10: Stability and Reactivity**

<b>Stability/Instability:</b>	Thermally stable at typical use temperatures and in closed containers.
<b>Conditions to Avoid:</b>	Avoid heat of open flame. Avoid high temperatures above 130°F (54.4°C).
<b>Incompatible Materials:</b>	Avoid contact with: Strong acids. Strong bases. Strong oxidizers.
<b>Hazardous Polymerization:</b>	Will not occur
<b>Thermal Decomposition:</b>	Decomposition products can include and are not limited to: Carbon oxides, sulphur oxides, nitrogen oxides, and halogenated compounds.

## **Section 11: Toxicological Information**

### **Acute Toxicity**

#### **Ingestion:**

- LD50, (rat): >4,000 mg/kg

#### **Dermal:**

- LD50, (rabbit): >2,010 mg/kg

#### **Inhalation:**

- LC50,(4h), (rat): (1.5 – 2.33) mg/L

**Eye Irritation (rabbit):**

- Category I for non-washed eyes – Corrosive (irreversible destruction of ocular tissue) or corneal involvement or conjunctival irritation persisting through day 21.
- Category III for washed eyes – Corneal involvement or conjunctival irritation clearing in 7 days or less.

**Skin Irritation (rabbit):**

- Slightly irritating

**Sensitization Skin:**

- Non-sensitizer (guinea pig).

**Chronic Toxicity and Carcinogenicity**

- EPA lists as likely carcinogenic at high-level exposures but not likely at dose levels that do not cause cytotoxicity and regenerative cell hyperplasia. Not listed as carcinogenic by IARC, NTP or OSHA.

**Teratogenicity, mutagenicity, and other reproductive effects:** Not likely to cause reproductive effects in humans.

## Section 12: Ecological Information

The information provided here is for the Captan.

**ENVIRONMENTAL FATE:**

- This product is acutely toxic to freshwater fish, practically non-toxic to birds and non-toxic to bees when used as directed.

**Persistence and Degradability:**

- Dissipates rapidly in the environment, is slightly-to-relatively immobile in soils.

**Aquatic Toxicity:**

- Rainbow Trout: LC50: (73.2 µg/L)
- Bluegill Sunfish: LC50: (72 µg/L)
- Daphnia magna: 48 hour EC50: (7 – 10 mg/L)
- Bees: Acute LD50: 46.26 µg/bee
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**Bird Toxicity:**

- Mallard Duck: LD50: 2000 mg/kg
- Bobwhite Quail: LD50: >2150 mg/kg

## Section 13: Disposal Considerations

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

## Section 14: Transport Information

**DOT:** UN-3082, Environmentally Hazardous Substance, Liquid, N.O.S., (Captan), 9, PG-III, RQ 10 lbs.

**IMDG:** UN-3082, Environmentally Hazardous Substance, Liquid (Captan), 9, III, Marine pollutant.

**ICAO/IATA:** Environmentally Hazardous Substance, Liquid, N.O.S., 9, UN-3082, III, RQ 10 lbs.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## Section 15: Regulatory Information

### OSHA Hazard Communication Standard:

- This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
- **EPA FIFRA INFORMATION**  
This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemical. The hazard information required on the pesticide label is listed out below. The pesticide label also includes other important information, including directions for use.
- **EPA/CERCLA Reportable Quantity:** 10 Lbs. (2.5 gal of product)

### SARA/TITLE III:

- **Sec 302: Extremely Hazardous Substance Notification:** This material is not known to contain any Extremely Hazardous Substances.
- **Sec. 311/312. Hazard Categories:** Immediate health hazard
- **Section 313 Toxic Chemical(s):** Captan (CAS 133-06-2)
- **RCA Waste Code:** Not applicable

### California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

- This product is listed.

### Toxic Substances Control Act (TSCA):

- All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30
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## Section 16: Other Information

*Drexel Chemical Company recommends that each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown below. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is*

***the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.***

**Date Issued: May 4, 2015**