SAFETY DATA SHEET

DREXEL CAPTAN 80 WDG FUNGICIDE

Section 1: Material Identification

Product Name: Drexel Captan 80 WDG Fungicide
EPA Reg No.: 19713-652
CAS NO: 133-06-2
Formula: C₉H₈Cl₃NO₂S
Company: Drexel Chemical Company
1700 Channel Avenue
Memphis, TN 38106

Identifiers:
EINECS: 205-087-0
RTECS: GW5075000
DOT information: See Section 14 for Transportation Information

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 Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide.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)

GHS classification:
Health hazards: Acute inhalation Category 4
Eye damage/irritation Category 2A

Environmental hazards: Aquatic acute toxicity Category 1

GHS label elements:
Signal word: Warning

GHS classification:
Health hazards: Acute inhalation Category 4
Eye damage/irritation Category 2A

Environmental hazards: Aquatic acute toxicity Category 1

GHS label elements:
Signal word: Warning
Hazard statements: Harmful if inhaled.
Causes serious eye irritation.
Very toxic to aquatic life.

Precautionary statements:

Prevention: Avoid breathing dust or vapors.
Use only outdoors or in well-ventilated area.
Wash exposed skin thoroughly after handling.
Wear eye protection/face protection.
Avoid release to the environment.

Response: If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
If in eyes: Hold eye open and rinse slowly and gently with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Collect spillage.

Storage: Store in a cool, dry, well ventilated and secure area designated specifically for pesticides and away from heat sources.

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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.:</th>
<th>% By Wt.:</th>
<th>OSHA PEL:</th>
<th>ACGIH TLV:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active ingredient:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Captan</td>
<td>133-06-2</td>
<td>80.0%</td>
<td>N/Av</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>20.0%</td>
<td>N/A</td>
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</tbody>
</table>

Section 4: First-Aid Measures

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious or convulsing person.

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 25 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. 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 treatment advice.
Note to Physician: Probable mucosal damage may contradict the use of gastric lavage.

**Section 5: Fire Fighting Measures**

**Fire Hazards:** Thermal decomposition during a fire can produce toxic fumes and irritating gases.

**Flammability classification (OSHA 29 CFR 1910.1200):** N/A
**Flash point:** N/A
**Lower flammable limit (% by volume):** N/Av
**Upper flammable limit (% by volume):** N/Av

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Evacuate the area and fight the fire from upwind at a safe distance to avoid hazardous vapors or decomposition products. Dike and collect fire-extinguishing water to prevent environmental damage and excessive waste runoff.

**Firefighting media:** Use foam, dry chemical, carbon dioxide, or water fog when fighting fires involving this product. Do not use water jet, as this may spread burning material. Minimize the use of water to avoid environmental contamination. Contain all runoff.

**Special Protective Equipment for Firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Use full face shield and operate in positive pressure mode. Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

**Hazardous Combustion Products:** Carbon oxides, Sulfur oxides, nitrogen oxides, halogenated compounds, irritating fumes and smoke.

**NFPA:**

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

(Rating: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Insignificant)

**Section 6: Accidental Release Measures**

**Steps to be taken if Material is Released or Spilled:**
- Sweep as much material as possible, keeping dust to a minimum, and place in an approved chemical waste container. Wash the spill area with water containing a strong detergent, absorb with earth, sand or absorbent material and sweep up and place in approved chemical waste container. For large spills contact Drexel Chemical Co. 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. 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 dust. Use with adequate ventilation. Wear long-sleeved shirt, long pants, shoes plus socks and chemical resistant apron 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$^3$

**Personal Protection:**

**Eye/Face Protection:** Wear dust proof and chemical splash goggles to prevent dust 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 dust or 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 pre-filter 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 thoroughly with soap and water 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

Physical State: Solid
Color: Light brown
Odor: Mild
Flash Point: None
Vapor Pressure (mmHg): N/A
Boiling Point: N/A
Vapor Density (air = 1): N/A
Bulk Density (H2O = 1): 39.37 lbs./ft^3
Freezing Point: N/A
Solubility in water (wt. %): Disperses
pH: 5-7 (5% emulsion)
Viscosity: N/A

Section 10: Stability and Reactivity

Stability/Instability: Thermally stable at typical use temperatures and in closed containers.

Conditions to Avoid: Avoid heat of open flame. Avoid high temperatures above 130°F (54.4°C).


Hazardous Polymerization: Will not occur

Thermal Decomposition: Decomposition products can include and are not limited to: Carbon oxides, sulfur oxides, nitrogen oxides, and halogenated compounds.

Section 11: Toxicological Information

The information provided here is for Captan:

Acute Toxicity:
Ingestion:
- LD50, (rat): >5,050 mg/kg

Dermal:
- LD50, (rabbit): >5,050 mg/kg

Inhalation:
- LC50, (4h), (rat): >2.23 mg/l

Eye Irritation (rabbit):
- Category II, “Positive” conjunctival irritation clearing in 8-21 days

Skin Irritation (rabbit):
- Non-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 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 LC50: (7-10 mg/L)

**Arthropod Toxicity:**
- Bees, Acute, LD50: 46.26 μg/bee

**Bird Toxicity:**
- Mallard Duck, LD50: 2,000 mg/kg
- Bobwhite Quail, LD50: >2,150 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-3077, Environmentally hazardous substances, solid, n.o.s., (Captan), 9, PG-III, RQ 10 lbs.

**IMDG:** UN-3077, Environmentally hazardous substances, solid, n.o.s., (Captan), 9, PG-III, RQ 10 lbs., Marine pollutant

**ICAO/IATA:** UN-3077, Environmentally hazardous substances, solid, n.o.s., (Captan), 9, PG-III, RQ 10 lbs.
Freight Description: Agricultural Fungicide, solid, n.o.s.

ERG Guide No.: 171

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:
- 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 Label Human Hazard Statements: DANGER: Corrosive. Causes irreversible eye damage. Harmful if swallowed or if inhaled. Do not get in eyes or on clothing. Avoid breathing dust. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
- EPA/CERCLA Reportable Quantity: 10 Lbs.

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
- Sec. 313. Toxic Chemical(s): Captan (CAS 133-06-2)
- RCRA 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

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 Revised: September 15, 2017

Supersedes: April 28, 2016