

DREXEL CAPTAN 4 FLOWABLE

SECTION 1: MATERIAL IDENTIFICATION

Product Name: Drexel Captan 4 Flowable Seed Protectant
EPA Reg. No.: 19713-645
Product Usage: Fungicide
Manufacturer: Drexel Chemical Company
Address: 1700 Channel Avenue
 PO Box 13327
 Memphis, Tennessee, 38113-0327, USA
 901-774-4370

Emergency Telephone Numbers: CHEMTREC 800-424-9300
 DREXEL CHEMICAL COMPANY 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 Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Refer to SECTION 15: REGULATORY INFORMATION for explanation.

SECTION 2: HAZARD(S) IDENTIFICATION

(As defined by the OSHA Hazard Communication Standard, 29)

Signal Word:

DANGER



Classifications:

Hazard Class:	Toxicity Study:	Category:
	Acute Toxicity, Inhalation	Category 4
	Skin corrosion/ irritation	Category 2
	Serious eye damage / irritation	Category 1
	Carcinogenicity	Category 2
	Hazard to Aquatic Environment, short term (Acute)	Category 1

Hazard Statements:

H Code:	Statement:
H332	Harmful if inhaled
H318	Causes serious eye damage
H315	Causes skin irritation
H351	Suspected of causing cancer
H400	Very toxic to aquatic life

HNOC (Hazard not otherwise classified): None available / Not applicable

Precautionary Statements:

Prevention: **Statement:**

- If medical advice is needed, have product container or label at hand.
- Keep out of reach of children.
- Obtain special instructions before use.
- Read label before use.
- Keep container tightly closed.
- Keep only in original container.
- Do not handle until all safety precautions have been read and understood.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Do not get in eyes, on skin or on clothing.
- Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.
 Avoid release into the environment.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Use personal protective equipment as required.
 In case of inadequate ventilation, wear respiratory protection.

Response:

If in Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Get immediate medical advice/attention.
If Swallowed: Call a POISON CENTER or doctor/physician if you feel unwell. Treat symptomatically.
If Inhaled: Remove person to fresh air and keep comfortable for breathing. Call POISON CENTER or doctor if you feel unwell.
If on Skin or Clothing: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
If exposed or concerned: None available, get medical attention.
Material released or spilled: Collect spillage.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in a cool, dry and secure area designated specifically for pesticides and away from heat sources. Always use oldest stock first.

Disposal: Dispose of contents/container in accordance with your local or area regulatory authorities.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name:</u>	<u>Synonym:</u>	<u>CAS No.:</u>	<u>EC No.:</u>	<u>RTECS:</u>	<u>% By Wt.:</u>
Active Ingredient: Captan	Captan	133-06-2	205-087-0	GW5075000	38.5 %
Inert Ingredients:	N/A	N/A	N/A	N/A	61.5 %

SECTION 4: FIRST-AID MEASURES

Have the product container, label and / or Safety Data Sheets (SDS) with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency medical treatment information.

Eye Contact: 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 eye. Call a poison control center or doctor for treatment advice.

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 person.

Skin/Clothing Contact: 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 further treatment advice.

Indication of Medical Attention and Special Treatment Needed: None / Treat symptomatically.
 If medical advice is needed, have product container or label at hand.

Note to Physician / Important Symptoms/ Effects, Acute and or Delayed: There is no specific antidote. Treat symptomatically. Probable mucosal damage may contradict the use of gastric lavage.

SECTION 5: FIRE FIGHTING MEASURES

Fire Fighting Media: Dry chemical, CO₂, Foam, Water mist / fog. Do not use water jet, as this may spread burning material. Minimize the use of water to avoid environmental contamination. Contain all runoff.


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. Cool closed containers exposed to fire with water spray, if possible. Dike and collect fire-extinguishing water to prevent environmental damage and excessive waste runoff. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

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.

Specific Fire Hazards: Thermal decomposition during a fire can produce toxic fumes and irritating gases.
 Flammability classification (OSHA 29 CFR 1910.1200): Non-combustible
 Flash point: >200°F
 Lower flammable limit (% by volume): N/Av
 Upper flammable limit (% by volume): N/Av

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

National Fire Protection Association:

NFPA: 	Health	Fire	Reactivity
	2	0	0

Ratings: 4-Extreme 3-High 2-Moderate 1-Slight 0-Insignificant

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to SECTION 7: HANDLING AND STORAGE, for additional precautionary measures. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION.

Environmental Precautions: Do not flush into surface water or sanitary sewer system. Prevent from entering soil, ditches, sewers, waterways and/or groundwater. Refer to SECTION 12: ECOLOGICAL INFORMATION.

Steps to be taken if Material is Released or Spilled:

Control the spill at its source.
 Small spills: Stop the flow of material, if this is without risk. Apply suitable absorbent and sweep up. Collect in suitable and properly labeled containers. Should be damped-off and pumped into containers. Soak up remainder with absorbent material and dispose of in accordance with local regulations. Prevent entry into waterways, sewers, basements or confined areas.

Large spills: Stop the flow of material, if this is without risk. Apply suitable absorbent and sweep up. Collect in suitable and properly labeled containers. Should be damped-off and pumped into containers. Soak up remainder with absorbent material and dispose of in accordance with local regulations. Prevent entry into waterways, sewers, basements or confined areas. Contact Drexel Chemical Company for clean-up assistance. Refer to SECTION 13: DISPOSAL CONSIDERATIONS, for additional information. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7: HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN

Handling: **General Handling:** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not swallow. Avoid breathing dust. Avoid breathing vapors. Do not eat, drink or smoke when using this product. Use with adequate ventilation. Wear chemical protective equipment when handling. Wear long-sleeved shirt, long pants and shoes with socks when handling. Keep away from heat, sparks and flame. Do not reuse this container. Refer to SECTION 8: EXPOSURE CONTROLS / 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. Keep away from unauthorized access. Do not store near children, food, foodstuffs, drugs or potable water supplies. Always use oldest stock first.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits:

Components:	OSHA PEL	ACGIH TLV	OTHER
Captan	N/A	5 mg/m ³	N/A

THIS SECTION IS FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD REFER TO THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

Engineering Controls:

Ventilation: Investigate engineering techniques to reduce exposures. 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 an eyewash facility / station and safety shower. Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

Personal Protection:

Eye/Face Protection: Eye contact should be avoided through the use of chemical safety glasses, goggles or a face shield selected in regard to exposure potential. Wear chemical splash goggles to prevent vapors or mists from entering the eyes. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields.

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.

Hand Protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene, Nitrile/butadiene rubber ("nitrile" or "NBR") or Viton, Polyvinyl chloride ("PVC" or "vinyl"). The selection of gloves for a particular application and duration of use in the workplace should also be taken into account all relevant workplace factors such as, but not limited to: other chemicals which may be handled, physical requirements (cut/ puncture protection, dexterity, thermal protection), potential body reactions to gloves materials, as well as the instructions / specs provided by the supplier of gloves.

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.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. When handling in enclosed areas, when large quantities of dusts 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).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Reported Value
Physical State	Viscous Liquid
Appearance / Color	White to Off white
Odor	Mild odor
Odor threshold	No data available
pH	4.0 – 5.0 (5% emulsion 20°C)
Melting point	No data available
Freezing point	<32°F
Boiling point	>212°F
Flash point	>200°F
Evaporation rate	No data available
Flammability	No data available
Lower flammability/explosive limits (LEL)	No data available
Upper flammability/explosive limits (UEL)	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	10.15 Lbs./gal.
Solubility in water	Disperses in water
Solubility in organic solvents	No data available
Partition coefficient (n-octanol/water)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	1200 – 1500 cp @ 20°C
Explosive properties	No data available
Oxidizing properties	No data available
Dissociation Constant	No data available
% Volatiles	No data available

Property Note: The physical properties and reported values are typical values based on materials tested but may vary from sample to sample. Thus, typical values should not be construed as a guaranteed analysis of any specific lot/ batch or specification items.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Thermally stable at typical use temperatures and in closed containers.
Chemical Stability:	Stable under recommended storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Avoid heat of open flame. Avoid high temperatures above 130°F (54.4°C).
Incompatible Materials:	Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

Hazardous Decomposition Products: Decomposition products can include and are not limited to: Carbon oxides, sulphur oxides, nitrogen oxides and halogenated compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Captan The information presented below is for the active ingredient.

Potential routes of exposure/potential health effects: Skin contact, Eye contact, Ingestion, Inhalation

Acute Oral:	LD₅₀ (Rat):	>4,000 mg/kg
Acute Dermal:	LD₅₀ (Rat):	>2,010 mg/kg
Acute Inhalation:	LC₅₀ (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
Skin Sensitization:	(Guinea Pig):	Non-sensitizer

Chronic Toxicity: No data available

Carcinogenicity:	EPA	EPA lists as likely carcinogenic at high-level exposures but not likely at dose levels that do not cause cytotoxicity and regenerative cell hyperplasia. EPA has classified Captan as a Group B2, probable human carcinogen.
	IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
	NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.
	OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

Mutagenicity: No data available

Teratogenicity: No data available

Reproductive Toxicity: Not likely to cause reproductive effects in humans.

Developmental Toxicity: No data available

Specific target organ toxicity- single exposure: No data available / Not classified

Specific target organ toxicity- repeated exposure: No data available / Not classified

Other Hazards Effects: No data available

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE

Captan The information presented below is for the active ingredient. This product is acutely toxic to freshwater fish, practically non-toxic to birds and non-toxic to bees when used as directed.

ECO-ACUTE TOXICITY

Aquatic Toxicity:	Rainbow Trout, LC₅₀	96 hour	73.2 µg/L
	Bluegill Sunfish, LC₅₀	96 hour	72 µg/L
	Daphnia magna, LC₅₀	48 hour	7 – 10 mg/L

Arthropod Toxicity:	Bees, Acute LD₅₀	46.26 µg/bee
Bird Toxicity:	Mallard Duck, LD₅₀ Bobwhite Quail, LD₅₀	2,000 mg/kg >2,150 mg/kg
Algal Toxicity:	Algae, LC₅₀ 96 hour	No data available
Soil Organism Toxicity:	Earthworm acute toxicity	No data available
Persistence and degradability:	Dissipates rapidly in the environment, is slightly-to-relatively immobile in soils.	
Bioaccumulation:	Dissipates rapidly in the environment.	
Mobility in soil:	Slightly-to-relatively immobile in soils.	
Other adverse effects:	Do not contaminate water supplies, lakes, streams, ponds or drains with this product.	

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:	Packages <2.5 gallons	Not Regulated
	Packages ≥ 2.5 gallons	UN 3082, Environmentally hazardous substance, liquid, N.O.S. (Captan), 9, PG-III, RQ 10 lbs.
IMDG:	UN3082, Environmentally hazardous substance, liquid, N.O.S., (Captan), 9, PG-III, RQ 10 Lbs, Marine pollutant	
ICOA / IATA:	UN3082, Environmentally hazardous substance, liquid, N.O.S., (Captan), 9, PG-III, RQ 10 lbs.	
UN Identification No.:	UN3082	
Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s., (Captan)	
Hazard Class:	9	



Packing Group:	III
Reportable Quantity:	10 Lbs. (2.5 gallons of product)
Environmental Hazard:	Marine Pollutant



Freight Description:	Agricultural Fungicide, Liquid, N.O.S.
ERG Guide No.:	171
Transport Information Note:	Cannot be transported with Class 8 or 5.

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 contains hazardous components as defined under the criteria of the Federal OSHA Hazardous Communication Standard 29 CFR 1910.1200.
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Pesticide Registration: This product is a pesticide registered by the Environmental Protection Agency (EPA) and is subject to certain FIFRA 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 chemicals.

EPA Reg. No.: 19713-645
FIFRA Label Signal Word: DANGER
FIFRA Label Information: KEEP OUT OF REACH OF CHILDREN
FIFRA Label Information: Hazards to Humans and Domestic Animals
 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. Wear goggles or face shield when handling. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse.

EPCRA SARA Title III Classification:

Section 302: Extremely Hazardous Substance Notification: This material is not known to contain any Extremely Hazardous Substances.
Sections 311 and 312: Immediate (Acute) Health Hazard: Yes
 Delayed (Chronic) Health Hazard: No
 Fire Hazard: No
 Reactive Hazard: No
 Sudden Release of Pressure Hazard: No

Section 313 Toxic Release Inventory (TRI): Captan (CAS No. : 133-06-2), 38.5%

CERCLA Reportable Quantity (RQ): Captan (CAS No. : 133-06-2), 10 lbs.

SARA 304 Reportable Quantity (RQ): Not listed / Not available

RCRA Hazardous Waste Classification (40 CFR 261): Not listed / Not available

US EPA 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.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): Captan Listed as causing: Cancer
 Listing date: 01/01/1990
 Listing basis: AB-USEPA

This product contains chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

SECTION 16: OTHER INFORMATION

Date Issued: March 22, 2021

Date Supersedes: December 16, 2020

Revision: 1

For all non-emergency questions about this product, please contact:

1700 Channel Avenue
 PO Box 13327
 Memphis, Tennessee 38113-0327, USA

Phone: 901-774-4370
 Fax: 901-774-4666
 Website: www.drexchem.com

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 above. 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.