



SAFETY DATA SHEET

DREXEL CHLOROTHALONIL 720 FUNGICIDE

Section 1: Material Identification

Product Name: Drexel Chlorothalonil 720 Fungicide

EPA Reg No.: 19713-690

CAS NO: 1897-45-6

Formula: C₈Cl₄N₂

Company: Drexel Chemical Company
1700 Channel Avenue
Memphis, TN 38106

Synonyms: Tetrachloroisophthalonitrile

Identifiers:

EINECS: 217-588-1

RTECS: NT2600000

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 Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide.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 toxicity – inhalation	Category 3
	Sensitization – skin	Category 1B
	Carcinogenicity	Category 2
	Specific target organ toxicity (single exposure) respiratory irritation	Category 3
	Environmental hazards:	Hazardous to aquatic environment – acute hazard

GHS label elements:

Signal word: Danger



Hazard statements:

May cause an allergic skin reaction.
 Toxic if inhaled.
 May cause respiratory irritation.
 Suspected of causing cancer.
 Very toxic to aquatic life.

Precautionary statements:

Prevention:

Avoid breathing dust/fume/gas/mist/vapor/spray.
 Use only outdoors or in a well-ventilated area.
 Contaminated work clothing should not be allowed out of the workplace.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Avoid release to the environment.

Response:

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call POISON CENTER or Doctor if you feel unwell.
If on skin: 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: Get medical advice/attention. Collect spillage.

Storage:

Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.

Disposal:

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

Section 3: Composition Information

<u>Components</u>	<u>CAS No.:</u>	<u>% By Wt.:</u>	<u>OSHA PEL:</u>	<u>ACGIH TLV:</u>
Active ingredient: Chlorothalonil	1897-45-6	54.0%	N/Av	N/A
Inert ingredients:	N/A	46.0%	N/A	N/A

Section 4: First-Aid Measures

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

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

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

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 further treatment advice.

Note to Physician: Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical steroids.

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): Non-combustible

Flash point: >200°F

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, nitrogen oxides, halogenated compounds, irritating fumes and smoke.

NFPA: Health: Flammability: Reactivity:

2 1 0

(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:

- Treat with suitable absorbent and sweep up, 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 mists or vapors. 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: 0.1 mg/m³ TWA Chlorothalonil

Personal Protection:

Eye/Face Protection: Wear 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, 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 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 TWA. Ventilate all transport vehicles prior to unloading. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Section 9: Physical and Chemical Properties

Appearance:	White to off-white liquid
Odor:	Slight
Odor threshold:	N/Av
pH:	4-7 @ 21°C
Melting point/freezing point:	N/Av
Solubility (water):	Disperses
Boiling point:	N/Av
Flash point:	>200°F

Evaporation rate:	N/Av
Flammability:	Not flammable
Upper/lower flammability or explosive limits:	N/A
Vapor pressure (mmHg):	N/Av
Vapor density:	N/Av
Density:	11.08 lbs./gal.
Partition coefficient (n-octanol/water):	N/Av
Auto ignition temperature:	N/A
Decomposition temperature:	N/Av
Viscosity:	1300cP @21°C
Explosive properties:	N/A
% Volatiles:	N/Av

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).

Incompatible Materials: Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

Hazardous Polymerization: Will not occur

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

Section 11: Toxicological Information

Acute Toxicity:

Oral:

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

Dermal:

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

Inhalation:

- LC50, (4h), (rat): > 2 mg/L

Eye Irritation (rabbit):

- Category II, "Positive" conjunctival irritation clearing in 8 – 21 days

Skin Irritation (rabbit):

- Slightly irritating

Sensitization Skin (Guinea Pig):

- Non-sensitizer

Chronic toxicity studies:

- In dogs, 1 year administration caused a significant decrease in body weight gain and increases in absolute liver and kidney weights.

Carcinogenicity:

- Causes kidney tumors in rats and mice via a non-genotoxic mode of action secondary to target organ toxicity.
- Did not show mutagenic effects in animal experiments.
- IARC identifies Chlorothalonil as a 2B carcinogen (possibly carcinogenic to humans). Not listed by OSHA, NTP, nor ACGIH.

Reproductive/development effects:

- Did not show reproductive toxicity effects in animal experiments. Did not show teratogenic effects in animal experiments.

Section 12: Ecological Information

Ecotoxicological data: The information provided here is for Chlorothalonil

ENVIRONMENTAL FATE:

- Low bioaccumulation potential. Not persistent in soil or water, Low mobility in soil. Sinks in water (after 24h).

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: 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: Not regulated

IMDG: UN-3082, Environmentally hazardous substances, liquid, n.o.s. (Chlorothalonil), 9, PG-III, Marine pollutant

ICAO/IATA: UN-3082, Environmentally hazardous substances, liquid, n.o.s (Chlorothalonil), 9, PG-III

Freight Description: Agricultural Fungicide, liquid, 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 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.
- **Label Human Hazard Statements:** CAUTION: Harmful if swallowed, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SARA/TITLE III:

- **Sec. 302. Extremely Hazardous Substance Notification:** This material is not known to contain any Extremely Hazardous Substances.
- **Sec. 304. Reportable Quantity:** None
- **Sec. 311/312. Hazard Categories:** Immediate health hazard, chronic health hazard.
- **Sec. 313. Toxic Chemical(s):** Chlorothalonil 54.0% (CAS 1897-45-6).
- **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.

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