



SAFETY DATA SHEET

DREXEL CHLOROTHALONIL 720

SECTION 1: MATERIAL IDENTIFICATION

Product Name: Drexel Chlorothalonil 720 Fungicide
EPA Reg. No.: 19713-690
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 Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Please see SECTION 15: REGULATORY INFORMATION for explanation.

SECTION 2: HAZARD IDENTIFICATION (As defined by the OSHA Hazard Communication Standard, 29)

Label Elements:
Signal Word:
DANGER

Pictograms:



Classifications:
Hazard Class:

Toxicity Study:
Acute Toxicity, Inhalation
Eye damage / Irritation
Sensitization, Skin
Specific Target Organs : Single exposure, Respiratory irritation
Carcinogenicity
Hazards to aquatic environment

Category:
Category 3
Category 2
Category 1B
Category 3
Category 2B
Category 1

Hazard Statements:	H Code:	Statement:
	H301	Toxic If swallowed
	H311	Toxic in contact with skin
	H331	Toxic if inhaled
	H319	Causes serious eye irritation
	H317	May cause an allergic skin reaction
	H335	May cause respiratory irritation
	H351	Suspected of causing cancer
	H400	Very toxic to aquatic life
	H410	Very toxic to aquatic life with long lasting effects



SAFETY DATA SHEET

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 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: 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.

Specific hazards: None available.

SECTION 3: COMPOSITION INFORMATION

<u>Chemical Name:</u>	<u>Synonym</u>	<u>CAS No.</u>	<u>EC No.:</u>	<u>RTECS:</u>	<u>% By Wt:</u>
Active Ingredient: Chlorothalonil	Tetrachloroisophthalonitrile	1897-45-6	217-588-1	NT2600000	54.0%
Inert Ingredients:	N/A	N/A	N/A	N/A	46.0%

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



SAFETY DATA SHEET

SECTION 5: FIRE FIGHTING MEASURES

Fire Fighting 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.

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.

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

National Fire Protection Association:

NFPA:	Health	Fire	Reactivity
	2	1	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:

Prevent from entering soil, ditches, sewers, waterways and/or groundwater. See SECTION 12: ECOLOGICAL INFORMATION.

Steps to be taken if Material is Released or Spilled:

Control the spill at its source.

Small spills: 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.

Large spills: For large spills contact Drexel Chemical Co. See SECTION 13: DISPOSAL CONSIDERATIONS, for additional information.



SAFETY DATA SHEET

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 / 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

Occupational Exposure Limits:

Components:	OSHA PEL	ACGIH TLV
Chlorothalonil	N/A	N/A
Inerts Ingredients	N/A	N/A

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

Engineering Controls:

Ventilation: When handling this product proper ventilation is required to maintain exposure below the TWA. (**Exposure Limits:** 0.1 mg/m³ TWA Chlorothalonil).
Ventilate all transport vehicles prior to unloading. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

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.

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 Polyvinyl chloride ("PVC" or "vinyl").

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. 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).



SAFETY DATA SHEET

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Reported value
Physical State	Liquid
Appearance / Color	White to off-white
Odor	Slight
Odor threshold	Not available
pH	4.0 - 5.5 @ 21°C
Melting point/Freezing point	Not available
Boiling point	Not available
Flash point	>200°F
Evaporation rate	Not available
Flammability	Not flammable
Upper flammability/explosive limits	Not available
Lower flammability/explosive limits	Not available
Vapor pressure	Not available
Vapor density	Not available
Relative density	11.10 lbs./ gal.
Solubility in water	Not available
Solubility in organic solvents	Not available
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	1300cP@ 21°C
Explosive properties	Not available
Oxidizing properties	Not available
Dissociation Constant	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Thermally stable at typical use temperatures and in closed containers.
Chemical Stability:	Stable
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, nitrogen oxides, and halogenated compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	
Potential routes of exposure/potential health effects:	Skin contact, Eye contact
Acute Oral:	LD50 (Rat): >5,050 mg/kg
Acute Dermal:	LD50 (Rat): >5,050 mg/kg
Acute Inhalation:	LC50 (Rat): >2 mg/l air - (4hr)
Eye Irritation:	(Rabbit): Category II "Positive" conjunctival irritation clearing in 8 – 21 days
Skin Irritation:	(Rabbit): Slightly irritating
Skin Sensitization:	(Guinea Pig): Non-Skin Sensitizer
Chronic Toxicity:	In dogs, 1 year administration caused a significant decrease in body weight gain and increases in absolute liver and kidney weights.



SAFETY DATA SHEET

Carcinogenicity:	Causes kidney tumors in rats and mice via a non-genotoxic mode of action secondary to target organ toxicity. IARC identifies Chlorothalonil as a 2B carcinogen (possibly carcinogenic to humans). Not listed by OSHA, NTP, nor ACGIH.
Mutagenicity:	Did not show mutagenic effects in animal experiments.
Teratogenicity:	Did not show teratogenic effects in animal experiments.
Reproductive Toxicity:	Did not show reproductive toxicity effects in animal experiments.
Developmental Toxicity:	Did not show reproductive toxicity effects in animal experiments.
Other Hazards Effects:	Not available

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE

The information provided here is for Chlorothalonil

Persistence and degradability:	Not persistent in soil or water.
Bioaccumulation:	Low bioaccumulation potential.
Mobility in soil:	Low mobility in soil.
Other adverse effects:	Sinks in water (after 24h). Do not contaminate water supplies, lakes, streams, ponds or drains with this product.

ECO-ACUTE TOXICITY

Aquatic Toxicity :	Rainbow Trout , LC₅₀	73.2µ/L
	Bluegill Sunfish, LC₅₀	72 µ/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:	Packages ≤ 119 gallons	NOT REGULATED
	Packages > 119 gallons	UN 3082, Environmentally hazardous substances, liquid, n.o.s. (Chlorothalonil), 9, PG-III, Marine pollutant
IMDG:	UN3082, Environmentally hazardous substances, liquid, n.o.s. (Chlorothalonil), 9, PG-III, Marine pollutant	
IATA / ICAO:	UN3082, Environmentally hazardous substances, liquid, n.o.s. (Chlorothalonil), 9, PG-III, Marine pollutant	



SAFETY DATA SHEET

UN Identification No.: UN3082
Proper Shipping Name: Environmentally hazardous substances, liquid, n.o.s. (Chlorothalonil)
Hazard Class: 9
Packing Group: III
Environmental Hazard: Marine Pollutant
Freight Classification: Agriculture 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 CFR1910.1200.

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.: 19713-690
FIFRA Label Signal Word: CAUTION
FIFRA Label Information: KEEP OUT OF REACH OF CHILDREN
FIFRA Label Information: 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.

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: Yes
Fire Hazard: No
Reactive Hazard: No
Sudden Release of Pressure Hazard: No

Section 313 Toxic Release Inventory (TRI): Chlorothalonil 54.0% (CAS 1897-45-6)

CERCLA/SARA 304 Reportable Quantity (RQ): None

RCRA Hazardous Waste Classification (40 CFR 261): This material is not known to contain any Extremely Hazardous Substances

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): This product is listed



Date Issued: 08/06/2019
Supersedes: 03/15/2019

SAFETY DATA SHEET

SECTION 16: OTHER INFORMATION

Date Issued: August 06, 2019 **Date Supersedes:** March 15, 2019 **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 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.