

# Safety Data Sheet

Date of issue: 05/26/2015

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** Chlorothalonil 82.5DF Select

**Synonyms:** Chlorothalonil

**Other means of identification:** EPA Reg. No. 89442-6

### 1.2. Intended Use of the Product

**Use of the substance/mixture:** Fungicide

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Manufacturer

Albaugh, LLC  
1525 NE 36<sup>th</sup> Street  
Ankeny, IA 50021

### 1.4. Emergency Telephone Number

**Emergency Number** : (800) 424-9300 CHEMTREC (transportation and spills) (800) 900-4044 Poison Control Center (human health) (800) 345-4735 ASPCA (animal health)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

#### Classification (GHS-US)

Acute Tox. 2 (Inhalation:dust,mist)	H330
Eye Dam. 1	H318
Carc. 2	H351
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

### 2.2. Label Elements

#### GHS-US Labeling

#### Hazard Pictograms (GHS-US)



#### Signal Word (GHS-US)

: Danger

#### Hazard Statements (GHS-US)

: H318 - Causes serious eye damage.  
H330 - Fatal if inhaled.  
H351 - Suspected of causing cancer.  
H400 - Very toxic to aquatic life.  
H411 - Toxic to aquatic life with long lasting effects.

#### Precautionary Statements (GHS-US)

: P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P260 - Do not breathe dust/fume.  
P271 - Use only outdoors or in a well-ventilated area.  
P273 - Avoid release to the environment.  
P280 - Wear eye protection, protective gloves.  
P284 - [In case of inadequate ventilation] wear respiratory protection.  
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
  
P308+P313 - If exposed or concerned: Get medical advice/attention.  
P310 - Immediately call a poison center/doctor  
P320 - Specific treatment is urgent (see Section 4 on this label).  
P391 - Collect spillage.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P501 - Dispose of contents/container according to local, regional, national, and



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### 2.3. Other Hazards

No additional information available.

### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Chlorothalonil	(CAS No) 1897-45-6	82.5	Acute Tox. 1 (Inhalation:dust,mist), H330 Eye Dam. 1, H318 Carc. 2, H351 Aquatic Acute 1, H400
Kaolin Clay	(CAS No) 1332-58-7	<10	Eye, Respiratory Tract, Lung

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. IF

SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Fatal if inhaled. Causes serious eye damage. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

**Symptoms/Injuries After Inhalation:** inhalation of vapors may cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** May cause an allergic reaction in sensitive individuals. May cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries After Ingestion:** May be harmful if swallowed.

**Chronic Symptoms:** May cause cancer.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Alcohol foam, carbon dioxide, dry chemical, water spray, fog. Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. A heavy water stream may spread burning liquid.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Firefighting Instructions:** Exercise caution when fighting any chemical fire.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

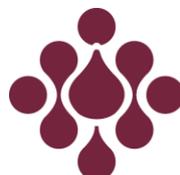
**Other Information:** Do not allow run-off from fire fighting to enter drains or water courses. De-contaminate equipment or materials involved in pesticide fires.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Handle in accordance with good industrial hygiene and safety practice.

#### 6.1.1. For Non-emergency Personnel



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**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel. Evacuate unnecessary personnel.

## 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Ventilate area.

## 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

## 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain and collect as any solid.

**Methods for Cleaning Up:** Collect spillage. Clear up spills immediately and dispose of waste safely.

## 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

**Incompatible Products:** Strong acids. Strong bases. Strong oxidizers.

**Storage Area:** Store locked up.

### 7.3. Specific End Use(s) Fungicide

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

Kaolin Clay (1332-58-7)		
USA ACGIH	TLV	2 mg/m <sup>3</sup> TWA (respirable)
USA OSHA	PEL	15 mg/m <sup>3</sup> TWA (total); 5 mg/m <sup>3</sup> TWA (respirable)
USA NIOSH	REL	10 mg/m <sup>3</sup> TWA (total); 5 mg/m <sup>3</sup>

### 8.2. Exposure Controls

#### Appropriate Engineering Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

#### Personal Protective Equipment

: Protective goggles. Gloves. Dust/aerosol mask.



#### Hand Protection

: Wear chemically resistant protective gloves.

#### Eye Protection

: Chemical goggles or safety glasses.

#### Respiratory Protection

: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

#### Other Information

: When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Light brown granules
Odor	: Slightly pungent
Odor Threshold	: No data available
<hr/>	
pH	: 8.8
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: -5 °C (23.00 °F)
Boiling Point	: 100 °C (212.00 °F)
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: 5.72 x 10 <sup>-7</sup> torr @25°C
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity	: No data available
Bulk Density	: 0.857 g m/L
Solubility	: Water: 0.6 - 0.9 % Dispersible in water
Partition Coefficient: N-octanol/water	: No data available
Viscosity	: No data available

### 9.2. Other Information

VOC content : 56 %

## SECTION 10: STABILITY AND REACTIVITY

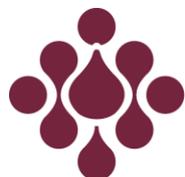
- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Product is stable.
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.
- 10.5. Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). Chlorine. Nitrogen oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

Acute Toxicity: Fatal if inhaled.

<b>Chlorothalonil 82.5DF Select</b>	
ATE (Dust/Mist)	0.05 mg/l/4h
<b>Chlorothalonil (1897-45-6)</b>	
LD50 Oral Rat	3260 mg/kg
LD50 Dermal Rat	2020 mg/kg
LD50 Dermal Rabbit	10 g/kg
LC50 Inhalation Rat	0.1 mg/l/4h
ATE (Oral)	3,260.00 mg/kg body weight
ATE (Dermal)	2,020.00 mg/kg body weight
ATE (Vapors)	310.00 mg/l/4h
ATE (Dust/Mist)	0.05 mg/l/4h



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**Skin Corrosion/Irritation:** Not classified

**pH:** 8.8

**Serious Eye Damage/Irritation:** Causes serious eye damage.

**pH:** 8.8

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Suspected of causing cancer.

<b>Chlorothalonil (1897-45-6)</b>	
<b>IARC group</b>	2B
<b>National Toxicity Program (NTP) Status</b>	Evidence of Carcinogenicity.

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Kaolin Clay:** Eye, Respiratory Tract, Lungs

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** inhalation of vapors may cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** May cause an allergic reaction in sensitive individuals. May cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries After Ingestion:** May be harmful if swallowed.

**Chronic Symptoms:** May cause cancer.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

<b>Chlorothalonil (1897-45-6)</b>	
<b>LC50 Fish 1</b>	0.012 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
<b>EC50 Daphnia 1</b>	0.0342 - 0.143 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
<b>LC 50 Fish 2</b>	0.0076 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

### 12.2. Persistence and Degradability

<b>Chlorothalonil 82.5DF Select</b>	
<b>Persistence and Degradability</b>	Not established.

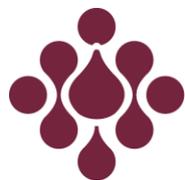
### 12.3. Bioaccumulative Potential

<b>Chlorothalonil 82.5DF Select</b>	
<b>Bioaccumulative Potential</b>	Not established.
<b>Chlorothalonil (1897-45-6)</b>	
<b>Log Pow</b>	2.9 (at 22 °C)

**12.4. Mobility in Soil** No additional information available

### 12.5. Other Adverse Effects

**Other Information** : Avoid release to the environment.



# Chlorothalonil 82.5DF SELECT™

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Treatment Methods:** Waste portions of this product and contaminated absorbent materials may be disposed of by incineration provided the following conditions are observed:

Incinerate in a suitable oven fed by a mixture of air and methane, at 1100-1200°C; The HCl which may form in the incinerator exhaust gas must be conveyed into an aqueous absorption system containing 18-20% of Ca(OH)<sub>2</sub>.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

**Ecology – Waste Materials:** Hazardous waste due to toxicity.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. In Accordance with DOT

**Proper Shipping Name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S. (Contains chlorothalonil)  
**Hazard Class** : 9  
**Identification Number** : UN3077  
**Label Codes** : 9  
**Packing Group** : III  
**ERG Number** : 171



### 14.2. In Accordance with IMDG

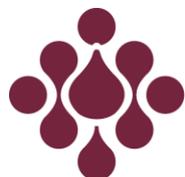
**Proper Shipping Name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains chlorothalonil)  
**Hazard Class** : 9  
**Identification Number** : UN3077  
**Packing Group** : III  
**Label Codes** : 9  
**EmS-No. (Fire)** : F-A  
**EmS-No. (Spillage)** : S-F



### 14.3. In Accordance with IATA

**Proper Shipping Name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains chlorothalonil)  
**Packing Group** : III  
**Identification Number** : UN3077  
**Hazard Class** : 9  
**Label Codes** : 9  
**ERG Code (IATA)** : 9L





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## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

<b>Chlorothalonil 82.5DF Select</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard Delayed (chronic) health hazard
<b>EPA FIFRA Pesticide Product Notice</b>	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 chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.
<b>EPA FIFRA Signal Word</b>	Warning
<b>EPA FIFRA Hazard Statements</b>	May be fatal if inhaled. Causes substantial, but temporary, eye injury. Harmful if absorbed through skin.
<b>EPA FIFRA Precautionary Statements</b>	Do not breathe dust. Remove and wash contaminated clothing before reuse. Do not get in eyes, on skin or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Avoid contact with skin.

<b>Chlorothalonil (1897-45-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on United States SARA Section 313	
<b>SARA Section 313 - Emission Reporting</b>	0.1 %

### 15.2 US State Regulations

<b>Chlorothalonil (1897-45-6)</b>	
<b>U.S. - California - Proposition 65 - Carcinogens List</b>	WARNING: This product contains chemicals known to the State of California to cause cancer.

<b>Chlorothalonil (1897-45-6)</b>	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S. - Pennsylvania - RTK (Right to Know) List	

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

<b>Revision Date</b>	: 05/26/2015
<b>Other Information</b>	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Acute	Tox. 1 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 1
Acute	Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute	Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1		Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3		Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 2		Hazardous to the aquatic environment - Chronic Hazard Category 2
Carc.	2	Carcinogenicity Category 2
Comb	. Dust	Combustible Dust
Eye D	am. 1	Serious eye damage/eye irritation Category 1

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
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# Chlorothalonil 82.5DF

## SELECT™

Skin Irrit. 2	Skin corrosion/irritation Category 2
H232	May form combustible dust concentrations in air
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

SDS US (GHS HazCom)

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