

SAFETY DATA SHEET



Revision date 11-Oct-2022

Revision Number 1

1. Identification

Product identifier

Product Name CHLOROTHALONIL 82.5DF SELECT

Other means of identification

Product Code(s) 89442-6

UN/ID no 3077

Synonyms None

Registration Number(s) 89442-6

Recommended use of the chemical and restrictions on use

Recommended use Fungicide

Restrictions on use Follow label instructions

Details of the supplier of the safety data sheet

Company Address

PrimeSource, A Division of Albaugh LLC.
1525 NE 36th St
Ankeny, IA 50211 USA

Emergency telephone number

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident:

- Call CHEMTREC Day or Night within USA and Canada: 1-800-424-9300, Outside USA and Canada: +1 703-741-5970

(collect calls accepted)

For Medical Emergencies Only:

- Call Albaugh LLC Day or Night within USA and Canada: 1-888-347-6732

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. Hazard(s) identification

Classification

| | |
|--|------------|
| Acute toxicity - Inhalation (Dusts/Mists) | Category 2 |
| Serious eye damage/eye irritation | Category 1 |
| Skin sensitization | Category 1 |
| Specific target organ toxicity (single exposure) | Category 3 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Fatal if inhaled

Causes serious eye damage

May cause an allergic skin reaction

May cause respiratory irritation

**Appearance** granules**Physical state** Solid**Odor** Slight Pungent**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Wear respiratory protection

Contaminated work clothing must not be allowed out of the workplace

Wear protective gloves/eye protection/face protection

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Immediately call a POISON CENTER or doctor

IF ON SKIN: Wash with plenty of water and soap

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER or doctor

Precautionary Statements - Storage

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

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

| Chemical name | CAS No | Weight-% | Active Ingredient |
|-------------------|-------------|-------------|-------------------|
| Chlorothalonil | 1897-45-6 | 80.03-84.98 | |
| Other Ingredients | PROPRIETARY | >10.00 | |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures**Description of first aid measures**

| | |
|---|--|
| General advice | Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. |
| Inhalation | If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Get medical attention immediately if symptoms occur. IF exposed or concerned: Get medical advice/attention. |
| Eye contact | Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. |
| Skin contact | Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. |
| Ingestion | Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. |
| Self-protection of the first aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. |

Most important symptoms and effects, both acute and delayed

| | |
|-----------------|--|
| Symptoms | Coughing and/ or wheezing. Difficulty in breathing. Burning sensation. Itching. Rashes. Hives. |
|-----------------|--|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|--|
| Note to physicians | May cause sensitization in susceptible persons. Treat symptomatically. |
|---------------------------|--|

5. Fire-fighting measures

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | Product is or contains a sensitizer. May cause sensitization by skin contact. |
| Explosion data | |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |
| Special protective equipment and precautions for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| | |
|-----------------------------|---|
| Personal precautions | Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. |
|-----------------------------|---|

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations Avoid contact with skin, eyes or clothing. Do not breathe dust. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Take off

contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|----------------|--------------------------|
| Physical state | Solid |
| Appearance | granules |
| Color | light brown |
| Odor | Slight Pungent |
| Odor threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|------------------------------------|-------------------------|
| pH | 8.5 - 9.5 | |
| pH (as aqueous solution) | | |
| Melting point / freezing point | -5 °C (23.00 °F) °C / °F | |
| Boiling point / boiling range | 100 °C (212.00 °F) °C / °F | |
| Flash point | No data available | |
| Evaporation rate | No data available | |
| Flammability (solid, gas) | No data available | |
| Flammability Limit in Air | | |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | 5.72 x 10 ⁻⁷ torr @25°C | |
| Vapor density | No data available | |
| Relative density | No data available | |
| Water solubility | Dispersible in water 0.6-0.9% | |
| Solubility(ies) | No data available | |
| Partition coefficient | No data available | |
| Autoignition temperature | No data available | |
| Decomposition temperature | | |
| Kinematic viscosity | No data available | |
| Dynamic viscosity | No data available | |

Other information

| | |
|----------------------|--------------------------|
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Liquid Density | No information available |
| Bulk density | 0.857 g/mL* |

*Listed density is an approximate value and does not necessarily represent that of a specific batch

10. Stability and reactivity

| | |
|------------------------------------|--|
| Reactivity | No information available. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | Excessive heat. |
| Incompatible materials | Strong acids. Strong bases. Strong oxidizing agents. |
| Hazardous decomposition products | None known based on information supplied. |

11. Toxicological information

Information on likely routes of exposure

Product Information

| | |
|---------------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on components). May cause irritation of respiratory tract. |
| Eye contact | Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes. |
| Skin contact | Specific test data for the substance or mixture is not available. May cause irritation. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). |
| Ingestion | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|-----------------|--|
| Symptoms | Coughing and/ or wheezing. Difficulty in breathing. Redness. Burning. May cause blindness. Itching. Rashes. Hives. |
|-----------------|--|

Acute toxicity

Numerical measures of toxicity

| | |
|------------------------|---------------|
| Oral LD50 | 5,050 mg/kg |
| Dermal LD50 | > 2,020 mg/kg |
| Inhalation LC50 | > 0.051 mg/L |

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-----------------------------|-----------------------|----------------------|------------------------|
| Chlorothalonil 1897-45-6 | > 10000 mg/kg (Rat) | > 10 g/kg (Rabbit) | = 0.1 mg/L (Rat) 4 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---|
| Skin corrosion/irritation | May cause skin irritation. |
| Serious eye damage/eye irritation | Causes burns. Risk of serious damage to eyes. |
| Respiratory or skin sensitization | May cause sensitization by skin contact. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|-----------------------------|-------|----------|-----|------|
| Chlorothalonil 1897-45-6 | - | Group 2B | - | X |

Legend

IARC (International Agency for Research on Cancer)

Group 2B*: Not carcinogenic in rats or mice. Listed as Category 2B by the International Agency for Research on Cancer (IARC) but expert opinion based on weight of evidence is that classification as a carcinogen is not warranted. Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

| | |
|------------------------------|---------------------------|
| Reproductive toxicity | No information available. |
|------------------------------|---------------------------|

| | |
|---------------------------------|-----------------------------------|
| STOT - single exposure | May cause respiratory irritation. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |
| Other adverse effects | No information available. |
| Interactive effects | No information available. |

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|-----------------------------|--|--|----------------------------|---|
| Chlorothalonil 1897-45-6 | EC50: =0.57mg/L (72h, <i>Desmodesmus subspicatus</i>) EC50: =0.0068mg/L (72h, <i>Pseudokirchneriella subcapitata</i>) | LC50: =0.012mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: =0.0076mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 0.0221 - 0.032mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 0.045 - 0.057mg/L (96h, <i>Lepomis macrochirus</i>) | - | EC50: 0.0342 - 0.143mg/L (48h, <i>Daphnia magna</i>) |

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

| Chemical name | Partition coefficient |
|-----------------------------|-----------------------|
| Chlorothalonil 1897-45-6 | 2.9 |

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

| | |
|-----------------------------------|--|
| DOT | Not regulated |
| UN/ID no | 3077 |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. |
| Transport hazard class(es) | 9 |
| Packing group | III |

IATA Not regulated

15. Regulatory information**U.S. EPA Label Information**

EPA Pesticide Registration Number 89442-6

EPA Pesticide Label WARNING May be fatal if inhaled. Causes substantial, but temporary eye injury. Harmful if absorbed through skin.

International Inventories

| | |
|----------------------|-----------------|
| TSCA | Does not comply |
| DSL/NDSL | Does not comply |
| EINECS/ELINCS | Does not comply |
| ENCS | Does not comply |
| IECSC | Does not comply |
| KECL | Does not comply |
| PICCS | Does not comply |
| AIIC | Does not comply |

Legend:**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**IECSC** - China Inventory of Existing Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AIIC** - Australian Inventory of Industrial Chemicals**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:.

| Chemical name | California Proposition 65 |
|----------------------------|---------------------------|
| Chlorothalonil - 1897-45-6 | Carcinogen |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|-----------------------------|------------|---------------|--------------|
| Chlorothalonil 1897-45-6 | X | - | X |

16. Other information

| | | | | |
|-----------------------------------|---------------------------|-----------------------|---------------------------|------------------------------|
| NFPA | Health hazards 4 | Flammability 0 | Instability 0 | Special hazards - |
| HMIS | Health hazards 4 * | Flammability 0 | Physical hazards 0 | Personal protection X |
| <i>Chronic Hazard Star Legend</i> | * = Chronic Health Hazard | | | |

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: Exposure controls/personal protection

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 11-Oct-2022
Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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End of Safety Data Sheet