# SAFETY DATA SHEET



## SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

**Product identifier:** **Cercobin™ Fungicide**

**Product use:** Fungicide.

**Supplier's name and address:**

*FMC Corporation*
1735 Market Street
Philadelphia, PA 19103
(215) 299-6000 (General Information)
msdsinfo@fmc.com (E-mail General Information)

**Manufacturer's name and address:**

Refer to supplier.

**Emergency Telephone #:**

Medical Emergencies:
1 800 / 331-3148 (PROSAR - U.S.A. & Canada)
1 651 / 632-6793 (PROSAR - All Other Countries - Collect)
For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)

## SECTION 2 — HAZARDS IDENTIFICATION

**GHS Signal Word:**

Warning

**Classification:**

| Health | Environmental | Physical |
|---|---|---|
| Acute toxicity – Oral – Category 4 | Not applicable | Not applicable |

**GHS Pictogram:**

**Hazard Statements:**

Harmful if swallowed.

**Precautionary Statements:**

**Prevention:**

Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.

**Response:**

If swallowed: Call a poison control center or doctor to get medical advice/attention if you feel unwell.
Rinse mouth.

**Storage:**

None

**Disposal:**

Dispose of contents/container according to label directions.

## SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | CAS # | % (weight) | ACGIH TLV | OSHA PEL |
|---|---|---|---|---|
| Thiophanate-methyl ((dimethyl[1,2-phenylene)-bis (iminocarbonothioyl)] bis[carbamate]) | 23564-05-8 | 41.3 | NE | NE |

| | |
|---|---|
| Inert ingredients: | 58.7 |

NE= None established

This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).

## SECTION 4 — FIRST AID MEASURES

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing.
Rinse skin immediately with plenty of water for 15-20 minutes.
Call poison control center or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control center or doctor for treatment advice.
Have a 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.

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. You may also contact 1-800-3331-3148 for emergency medical treatment information.

**Note to Physician:** None

**Most important symptoms and effects, both acute and delayed: M**ild eye irritant. Prolonged or repeated skin contact may cause irritation. May be harmful if swallowed.

**Indication of any immediate medical attention and special treatment needed:** Get medical attention if swallowed or eye irritation persists.

## SECTION 5 — FIRE FIGHTING MEASURES

**Flash point:** Not flammable.
**Flammable limits (% by volume):** Not applicable
**Explosive properties:** Not explosive
**Suitable extinguishing media:** Dry chemical, carbon dioxide, alcohol foam or water spray.
**Special fire-fighting procedures/equipment:** Move containers away from fire areas if it can be done without risk. If impossible, cool them with water spray. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Fight fire from protected location or maximum possible distance. Dike area to prevent water runoff. Fire fighters should wear self-contained breathing apparatus and protective clothing.
**Special hazards arising from the substance or mixture:** During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion: carbon oxides, nitrogen oxides and sulphur dioxide.

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Observe all safety precautions when cleaning up spills. Use personal protection equipment. Depending on the magnitude of the spill, this may mean wearing respirator, face mask or safety glasses, chemical resistant clothing, protective gloves and rubber boots when cleaning up spills. See Section 8, Personal Protection. Stop the source of the spill immediately if safe to do so. It is recommended to have a predetermined plan for the handling of spills. Empty, closed containers for the collection of spills should be available.
**Environmental precautions:** Contain the spill to prevent any further contamination of surface, soil or water. Wash waters must be prevented from entering surface water drains. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body.
**Spill response/Cleanup:** If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should be absorbed onto an absorptive material such as universal binder, hydrated lime, Fuller's earth or other absorbent clays. Transfer to suitable containers. Clean area with strong industrial detergent and much water. Absorb wash liquid onto inert absorbent clay and collect in suitable containers. The used containers should be properly closed and labelled.

Large spills which soak into the ground should be dug up and placed in suitable containers.

Spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal. Refer to Section 13 for disposal.

## SECTION 7 — HANDLING AND STORAGE

**Safe handling procedures:** Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling. Before removing gloves, wash them with water and soap. After work, take off all work clothes and shoes. Take a shower, using water

and soap. Wear only clean clothes when leaving the job. Wash protective clothing and protective equipment with water and soap after use. Do not discharge to the environment. Collect all waste material and remains from cleaning equipment, etc., and dispose of as hazardous waste.

**Storage recommendations:** This product is stable under normal conditions of warehouse storage. Do not contaminate water, food, or feed by storage and disposal. Store in the original container in a dry area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, absorb with sand or other inert material and dispose of absorbent in accordance with label instructions and Section 13.

Storage duration: 24 months

Protect from temperatures below 14° F (-10° C) and above 104° F (40° C).

## SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Ventilation and engineering controls:** If handled indoors, provide mechanical exhaust ventilation to minimize concentrations.

**Protective gloves:** Wear chemical-resistant gloves: nitrile or butyl rubber.

**Eye protection:** Wear protective eyewear.

**Respiratory protection:** The product is not likely to present an airborne exposure concern during normal handling, but in the event of a discharge of the material which produces a heavy vapour or dust, works should put on officially approved face mask or respiratory protection equipment.

**Other protective equipment:** Wear long-sleeved shirt and long pants, shoes and socks. Wear appropriate chemical resistant clothing to prevent skin contact depending on the extent of exposure.

**Permissible exposure levels:** See Section 3.

**General hygiene considerations:** Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** White-gray liquid

**Odor:** Faint specific odor

**Odor threshold:** ND

**pH:** 5-7 (20° C; undiluted substance)

**Melting point:** **Thiophanate-methyl:** Decomposes before melting

**Freezing point:** ND

**Initial boiling point and boiling range: Thiophanate-methyl:** Decomposes before boiling

**Flash point:** Not flammable

**Evaporation rate:** NA

**Flammability:** 212° F (>100° C)

**Upper/lower flammability or explosive limits:** NA

**Vapor pressure:** **Thiophanate-methyl:** $8.8 \times 10^{-03}$ mPa @ 25° C

**Vapor density:** ND

**Relative density:** 1.17 – 1.23 g/ml @ 20° C

**Solubility(ies):** Solubility of **Thiophanate-methyl** at 20° C in:

| | | |
|---|---|---|
| water | 20 | mg/L |
| ethyl acetate | 8400 | mg/L |
| n-hexane | 0.47 | mg/L |
| methanol | 7800 | mg/L |
| xylene | 110 | mg/L |

**Partition coefficient (n-octanol/water):** **Metolachlor:** Log $P_{ow}$ = 1.50

**Auto-ignition temperature:** None

**Decomposition temperature:** ND

**Viscosity:** ND

ND: Not determined
NA: Not applicable

## SECTION 10 — REACTIVITY AND STABILITY DATA

**Stability and reactivity:** This product is stable under the recommended storage and handling conditions described in Section 7.
**Hazardous polymerization:** Not known to occur.
**Conditions to avoid:** Protect from temperatures below 14° F (-10° C) and above 104° F (40° C).
**Materials to avoid (incompatibles):** None known.
**Hazardous decomposition products in a fire:** During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion: carbon oxides, nitrogen oxides, and sulphur dioxide.

## SECTION 11 — TOXICOLOGICAL INFORMATION

**Routes of exposure:** Ingestion, skin.
**Acute toxicity:** Mildly irritating to eyes. Prolonged or repeated skin contact may cause irritation.The acute toxicity is estimated as:
**Toxicological data (product):**
$LC_{50}$ , inhalation (mg/L/4 hrs) = 2.25
$LD_{50}$, oral, (mg/kg) = 1000-2000 (male); 816 (female)
$LD_{50}$, dermal, (mg/kg) = >2000
Not irritating to skin
Not irritating to eyes
Skin sensitizer
**Carcinogenicity:** No known carcinogenic effects.
**Teratogenicity, mutagenicity, other reproductive effects:** No known teratogenic, mutagenic or reproductive effects.

## SECTION 12 — ECOLOGICAL INFORMATION

**Environmental hazards:** Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters or rinsate.
**Ecotoxicological information:** The ecotoxicity of the active ingredients is measured as:

| | | | **Metolachlor** |
|---|---|---|---|
| - Fish | Rainbow trout (*Oncorhynchus mykiss*) ... | 96-h $LC_{50}$ | 11 mg/l |
| - Invertebrates | Daphnids (*Daphnia magna*) ..... | 48-h $EC_{50}$ | 11 mg/l |
| | | 21-day NOEC | 0.18 mg/l |
| - Algae | Green algae (*Selenastrum capricornutum*) ..... | 72-h $IC_{50}$ | 45.5 mg/l |
| - Birds | Mallard duck (*Anas platyrhynchos*) ..... | $LD_{50}$ | >4640 mg/kg |
| - Earthworms | *Eisenia foetida foetida* ..... | $LC_{50}$ | > 13.2 mg/kg soil |
| - Insects | Bees (*Apis mellifera*) ..... | $LD_{50}$, oral | >100 µg/bee |

**Environmental fate:**
**Thiophanate-methyl:** Degrades relatively easy in soil and is expected to be mobile.

## SECTION 13 — DISPOSAL CONSIDERATIONS

**Handling for disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
**Methods of disposal:** Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems. Refer to product label for specific container disposal instructions.

## SECTION 14 — TRANSPORTATION INFORMATION

**US DOT 49 CFR information:**
<2 gallons: Not regulated

≥2 gallons: UN3082, Environmentally hazardous substance, liquid, n.o.s. (thiophanate-methyl), 9, PGIII, RQ

**INTERNATIONAL:**

**IMDG/IMO (vessel):** UN3082, Environmentally hazardous substance, liquid, n.o.s. (thiophanate-methyl), 9, PGIII, RQ

**IATA/ICAO (air):** UN3082, Environmentally hazardous substance, liquid, n.o.s. (thiophanate-methyl), 9, PGIII, RQ

## SECTION 15 — REGULATORY INFORMATION

**FIFRA:** This chemical is a pesticide product registered by the 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, and for workplace labels on non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION
Harmful if absorbed through the skin or if swallowed.
Avoid contact with skin, eyes or clothing.

**EPA/CERCLA Reportable Quantity (RQ):** Thiophanate-methyl RQ=10 lbs

**SARA TITLE III:**

*Sec. 302, Extremely Hazardous Substance Notification:* This material is not known to contain any Extremely Hazardous Substances.

*Sec. 311/312, Hazard Categories:* Immediate (acute) health hazard

*Sec. 313, Toxic Chemicals Notification*: Thiophanate-methyl (41.3%)

**California Proposition 65:** This product contains a chemical (thiophanate-methyl) known to the State of California to cause female and male reproductive toxicity.

## SECTION 16 — OTHER INFORMATION

**HMIS Rating:** 2 Health; 0 Flammability; 0 Reactivity
**NFPA Rating:** 2 Health; 0 Flammability; 0 Reactivity
0-minimal 1- slight 2-moderate 3-severe 4-extreme

**Revision date:** March 11, 2014
**Revision note:** SDS Sections Updated

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**End of Safety Data Sheet**