

# SAFETY DATA SHEET



Revision date 07-Oct-2020

Revision Number 3

## 1. Identification

### Product identifier

Product Name Koverall Fungicide

### Other means of identification

Product Code(s) 42750-389

UN/ID no. UN3077

Synonyms None

EPA Registration Number(s) 42750-389

### 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

ALBAUGH LLC  
1525 NE 36th St,  
Ankeny, IA 50211

#### 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)

## 2. Hazard(s) identification

### Classification

Serious eye damage/eye irritation	Category 2B
Skin sensitization	Category 1

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

Warning

**Hazard statements**

Causes eye irritation  
May cause an allergic skin reaction

**Appearance****Physical state** Solid**Odor** Musty**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing must not be allowed out of the workplace  
Wear protective gloves

**Precautionary Statements - Response**

Specific treatment (see .? on this label)  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
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

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Unknown acute toxicity****Other information**

Harmful 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-%	Trade secret	Active Ingredient
Mancozeb	8018-01-7	75	*	
Ethylene Thiourea	96-45-7	<25	*	

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

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

Show this safety data sheet to the doctor in attendance.

<b>Inhalation</b>	Remove to fresh air.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Get medical attention if irritation develops and persists. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Skin contact</b>	Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.

#### **Most important symptoms and effects, both acute and delayed**

**Symptoms** 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**

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	Product is or contains a sensitizer. May cause sensitization by skin contact.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment for fire-fighters</b>	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**

<b>Personal precautions</b>	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.

#### **Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	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. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

### 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

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Mancozeb 8018-01-7	-	(vacated) Ceiling: 5 mg/m <sup>3</sup> Ceiling: 5 mg/m <sup>3</sup> Mn	IDLH: 500 mg/m <sup>3</sup> Mn TWA: 1 mg/m <sup>3</sup> Mn STEL: 3 mg/m <sup>3</sup> Mn

#### 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

Wear safety glasses with side shields (or goggles). None required for consumer use.

#### Hand protection

Wear suitable gloves.

#### Skin and body protection

Wear suitable protective clothing.

#### Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

#### General hygiene considerations

Avoid contact with skin, eyes or clothing.

## 9. Physical and chemical properties

**Information on basic physical and chemical properties**

Physical state	Solid
Appearance	
Color	yellow; brown
Odor	Musty
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point / freezing point	192.22 203.89	
Boiling point / boiling range	No data available	Not applicable
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	0.013	@ 25 °C
Vapor density	No data available	
Relative density	No data available	
Water solubility	Soluble in water 6.2	@ 20 °C
Solubility(ies)	No data available	
Partition coefficient	n-octanol/water: Mancozeb: 2.14x10 <sup>1</sup>	
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	0.6-0.7

**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	None known based on information supplied.
Incompatible materials	None known based on information supplied.
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.

<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes eye irritation. May cause redness, itching, and pain.
<b>Skin contact</b>	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components).
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Itching. Rashes. Hives. May cause redness and tearing of the eyes.

### Acute toxicity

#### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

#### Unknown acute toxicity

<b>Oral LD50</b>	> 5,000 mg/kg
<b>Dermal LD50</b>	> 5,000 mg/kg
<b>Inhalation LC50</b>	> 5.14 mg/l (4-hour)

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Mancozeb 8018-01-7	= 5 g/kg ( Rat )	> 5000 mg/kg ( Rabbit ) > 10 g/kg ( Rat ) > 5 g/kg ( Rabbit )	-
Ethylene Thiourea 96-45-7	= 545 mg/kg ( Rat ) = 1832 mg/kg ( Rat )	-	-

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

<b>Skin corrosion/irritation</b>	No classification is proposed, based on conclusive negative data.
<b>Serious eye damage/eye irritation</b>	Causes moderate eye irritation.
<b>Respiratory or skin sensitization</b>	May cause sensitization by skin contact.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.

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

Chemical name	ACGIH	IARC	NTP	OSHA
Ethylene Thiourea 96-45-7	-	Group 3	Reasonably Anticipated	X

#### Legend

##### **IARC (International Agency for Research on Cancer)**

Group 3 - Not Classifiable as to Carcinogenicity in Humans

##### **NTP (National Toxicology Program)**

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

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

X - Present

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Target organ effects</b>	liver, kidney, Respiratory system, Eyes, Skin, Central nervous system, blood, Reproductive System, Thyroid, Lymphatic System.
<b>Aspiration hazard</b>	No information available.
<b>Other adverse effects</b>	No information available.

**Interactive effects** No information available.

## 12. Ecological information

**Ecotoxicity** Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Mancozeb 8018-01-7	-	LC50: =1mg/L (48h, Lepomis macrochirus)	-	-
Ethylene Thiourea 96-45-7	-	LC50: 5600 - 10000mg/L (96h, Poecilia reticulata)	-	LC50: 21.6 - 32.2mg/L (48h, Daphnia magna)

**Persistence and degradability** No information available.  
**Bioaccumulation** There is no data for this product.

**Other adverse effects** No information available.

## 13. Disposal considerations

### Waste treatment 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.

**US EPA Waste Number** U116

**California Hazardous Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

## 14. Transport information

### DOT

**Notes** Not regulated for transportation if shipped in Non Bulk packaging. The classification below pertains to the shipment in Bulk packaging. (Bulk shipment is > 882 lbs.)

**UN/ID no.** UN3077

**Proper shipping name** Environmentally hazardous substance, solid, n.o.s.

**Transport hazard class(es)** 9

**Packing group** III

**Special Provisions** 146, 335, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33, 8

**DOT Marine Pollutant** P

**Marine pollutant** Mancozeb

**Description** UN3077, Environmentally hazardous substance, solid, n.o.s. (Mancozeb), 9, III, Marine pollutant

### TDG

**Marine pollutant** Not regulated  
Mancozeb.

**Description** UN3077, Environmentally hazardous substance, solid, n.o.s. (Mancozeb), 9, III

### MEX

Not regulated

### ICAO (air)

**Description** Not regulated  
UN3077, Environmentally hazardous substance, solid, n.o.s. (Mancozeb), 9, III

<b>IATA</b>	Not regulated
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Mancozeb), 9, III
<b>IMDG</b>	Not regulated
<b>Marine pollutant</b>	Mancozeb
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Mancozeb), 9, III, Marine pollutant
<b>RID</b>	Not regulated
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Mancozeb), 9, III
<b>ADR</b>	Not regulated
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Mancozeb), 9, III
<b>ADN</b>	Not regulated

## 15. Regulatory information

### U.S. EPA Label Information

**EPA Pesticide Registration Number** 42750-389

**EPA Pesticide Label** CAUTION. Harmful if absorbed through skin. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Does not comply
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

#### **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
- AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Mancozeb - 8018-01-7	1.0
Ethylene Thiourea - 96-45-7	0.1

#### **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).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Mancozeb 8018-01-7	-	X	-	-

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Ethylene Thiourea 96-45-7	10 lb	-

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Mancozeb - 8018-01-7	Carcinogen
Ethylene Thiourea - 96-45-7	Carcinogen Developmental

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Mancozeb 8018-01-7	X	-	X
Ethylene Thiourea 96-45-7	X	X	X

**16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 2	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and chemical properties</b> -
<b>HMIS</b>	<b>Health hazards</b> 2 *	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal protection</b> X
	<i>Chronic Hazard Star Legend</i>			
				<i>* = Chronic Health Hazard</i>

**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)

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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** 07-Oct-2020  
**Revision Note** No information available.

**Disclaimer**

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**End of Safety Data Sheet**