

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**COMPANY ADDRESS:**

ALBAUGH, LLC
Ankeny, IA 50021
1-800-247-8013

EMERGENCY TELEPHONE NUMBERS:

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call
CHEMTREC Day or Night

- Within USA and Canada: 1-800-424-9300 CCN771
- Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

PRODUCT NAME : **METALAXYL 4.0 ST**
CHEMICAL NAME : Metalaxyl
PRODUCT USE : Fungicide
PRODUCT CODE : EPA Reg. No 42750-219

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200)

Light tan to brown liquid suspension

HEALTH HAZARDS: Warning. Harmful if swallowed. Moderate eye irritant.

PHYSICAL HAZARDS: May release toxic fumes if burned.

ENVIRONMENTAL HAZARDS: Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS**

COMPONENT	PERCENTAGE	CAS NUMBER
Metalaxyl	44.08%	57837-19-1
Other ingredients	55.92%	n/a

SECTION 4 - FIRST AID MEASURES

First Aid responders should use protective equipment in Section 8 if there is a potential for exposure to product.

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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 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 ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 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.

NOTE TO PHYSICIAN: No specific antidote. Treat symptomatically. Symptoms of Poisoning: The compound does not cause any definite symptoms that would be diagnostic. Contact with the eyes may cause irritation.

Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5 - FIRE FIGHTING MEASURES

National Fire Protection Rating (NFPA)

HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

FLASHPOINT: > 100°C (212°F)

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, or water spray when fires involve this material.

FIRE AND EXPLOSION HAZARD: Can burn in fire, releasing toxic gases from thermal decomposition or combustion.

FIRE FIGHTING INSTRUCTIONS: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Dike and collect water to prevent environmental damage due to run off.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece.

Minimize use of water to prevent environmental contamination

SECTION 6 - ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILLS OR LEAKS: Clean up spills immediately, observing precautions in Section 8 of this document. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

SMALL SPILL: Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal.

LARGE SPILL: Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal. After removal, clean contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container.

Minimize use of water to prevent environmental contamination

SECTION 7 - HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN!

HANDLING: Use only in a well-ventilated area. Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

STORAGE: Store in a cool dry location. Do not store in direct hot sunlight. Do not store above 90°F for prolonged periods of time. After prolonged storage in intense cold, allow product to return to approximately 75°F before using.

Do not contaminate water, food or feed by storage and disposal.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION**EXPOSURE LIMITS (8 hour TWA, ppm):**

COMPONENT	OSHA PEL	ACIGH TLV
Metalaxyl	Not listed	Not listed

ENGINEERING CONTROLS: Proper ventilation is required when handling or using this product to minimize exposure to airborne contaminants. Local mechanical exhaust ventilation may be required. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION - Safety glasses

CLOTHING - Long-sleeved shirt and long pants, shoes and socks.

GLOVES – Chemical-resistant gloves, such as barrier laminate, or nitrile rubber or neoprene rubber or viton.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light tan to brown liquid suspension
Odor:	faint odor
pH:	6.0 – 8.0
Melting Point:	Not applicable
Boiling Point:	No data
Flash Point:	>100°C
Evaporation Rate:	No data
Flammability:	Not flammable
Flammability Limits:	Not applicable
Vapor Pressure:	0.75 mPa (25°C) (Metalaxyl)
Vapor Density:	Not applicable
Density:	1.09 – 1.12 g/ml (9.10 – 9.30 lb/gl)*
Solubility:	Emulsifies
Partition Coefficient:	$\log P_{ow} = 1.75$ (25°C) (Metalaxyl)
Auto-Ignition Temperature:	No data
Decomposition Temperature:	No data
Viscosity:	987.429 cSt (20°C); 559.922 cSt (40°C)

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

SECTION 10 - STABILITY AND REACTIVITY

PRODUCT REACTIVITY: None known

CHEMICAL STABILITY: Stable, however may decompose if heated.

HAZARDOUS REACTION/POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Avoid temperatures above (115°F, 46°C) and below 25°F (-6°C).

INCOMPATIBLE MATERIALS: Acidic and oxidizing materials

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition can oxides of nitrogen and carbon monoxide.

SECTION 11 - TOXICOLOGICAL INFORMATION

Data from similar but not identical formulation:

ACUTE TOXICITY:

Oral LD ₅₀ (rat)	1,750 mg/Kg
Dermal LD ₅₀ (rat)	> 5,000 mg/Kg
Inhalation LC ₅₀ (rat)	> 2.02 mg/L
Eye Irritation (rabbit)	Moderately irritating
Skin Irritation (rabbit)	Slightly irritating
Sensitization (guinea pig)	Non-sensitizer

CARCINOGEN STATUS:

OSHA	- Not listed
NTP	- Not listed
IARC	- Not listed

TERATOGENICITY: Developmental and reproductive studies for metalaxyl were negative

MUTAGENICITY: Weight of evidence indicates that metalaxyl is non-mutagenic

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwater or rinsates.

Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seed spilled during loading and planting. Dispose of all excess treated seed by burying seed away from bodies of water.

Groundwater Advisory - This chemical is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

FATE: Metalaxyl has a soil half-life of 60-90 days and is moderately mobile depending on soil type and other conditions.

FISH TOXICITY: (technical)96 hour LC₅₀, Rainbow trout – > 100 mg/L96 hour LC₅₀, Bluegill – > 100 mg/L**AVIAN TOXICITY:** (technical)Dietary LC₅₀, Bobwhite quail – > 10,000 ppmDietary LC₅₀, Mallard duck - > 10,000 ppm**BEE TOXICITY:** (technical) > 25 ug/bee**SECTION 13 - DISPOSAL CONSIDERATIONS**

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Non-refillable containers: Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Refillable container: Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

Refer to the container label to determine if it is refillable and for complete cleaning and disposal instructions.

SECTION 14 - TRANSPORT INFORMATION**SHIPPING DESCRIPTION:**

(Ground transport)

Not regulated by DOT

TRANSPORT HAZARD CLASS:

N/A

UN NUMBER:

N/A

DOT PACKING GROUP:

PG III

SECTION 15 - REGULATORY INFORMATION**CERCLA REPORTABLE QUANTITY:**

Not listed

SARA TITLE III STATUS:

311/312 Hazard Categories –

Immediate and Delayed Health

313 Toxic Chemicals –

None known

CALIFORNIA PROP 65:

Not listed

TSCA:

This product is exempted from TSCA because it is solely for FIFRA regulated use.

SECTION 16 - OTHER INFORMATION

HMIS HAZARD RATINGS	HEALTH	2
	FLAMMABILITY	0
	PHYSICAL HAZARD	1
	4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Albaugh's knowledge. Albaugh makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions.

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling.

It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

REVISED DATE: September, 2015

REFERENCE: Update Section 1 phone numbers and Section 9 density and pH values.