

**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 : **LEGUME PREMIX F2 RTU ST**  
 CHEMICAL NAMES : Fludioxonil and Metalaxyl  
 PRODUCT USES : Fungicide Seed Protectant  
 PRODUCT CODE : EPA Reg. No. 42750-323

**SECTION 2 - HAZARDS IDENTIFICATION SUMMARY**

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

Red liquid

**HEALTH HAZARDS:** Mildly irritating to the eyes and skin. May be harmful if swallowed.

**PHYSICAL HAZARDS:** Can decompose at high temperatures releasing toxic gases.

**ENVIRONMENTAL HAZARDS:** Toxic to aquatic life. Keep out of waterways.

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

COMPONENT	PERCENTAGE	CAS NUMBER
Metalaxyl	5.46	57837-19-1
Fludioxonil	0.72	131341-86-1
Other Ingredients	93.82	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 available, treat symptomatically.

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

**FLASHPOINT:** Not applicable**EXTINGUISHING MEDIA:** Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.**FIRE AND EXPLOSION HAZARD:** Can burn in fire, releasing irritating and toxic gases due to 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 used to fight fire to prevent environmental damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

Minimize use of water to prevent environmental contamination. Contact your State Pesticide or Environmental Control Agency, or nearest EPA Regional Office for guidance on disposal.

**FIRE FIGHTING EQUIPMENT:** Self-contained breathing apparatus with full facepiece.**HAZARDOUS COMBUSTION PRODUCTS:** Hydrogen cyanide, Hydrogen chloride, Carbon monoxide, Nitrogen oxides.**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.

This material should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Minimize use of water to prevent environmental contamination

**SECTION 7 - HANDLING AND STORAGE**

KEEP OUT OF REACH OF CHILDREN!

Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling concentrate.

**HANDLING:** Use only in a well-ventilated area. Minimize dust generation and accumulation.**STORAGE:** Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in a cool dry location. Protect from excessive heat.

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

COMPONENT	OSHA PEL	ACIGH TLV
Metalaxyl	Not Est	Not Est
Fludioxonil	Not Est	Not Est

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

**PERSONAL PROTECTIVE EQUIPMENT:**

1. Long-sleeved shirt and long pants,
2. Shoes plus socks,
3. Chemical-resistant gloves
4. Protective eyewear.

**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.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Red opaque liquid
<b>Odor:</b>	Faint
<b>pH:</b>	5.0 – 5.5 @ 1%
<b>Melting Point:</b>	Not applicable
<b>Boiling Point:</b>	No data
<b>Flash Point:</b>	Not applicable
<b>Evaporation Rate:</b>	No data
<b>Flammability:</b>	Not flammable
<b>Flammability Limits:</b>	Not applicable
<b>Vapor Pressure:</b>	No data
<b>Vapor Density:</b>	Not applicable
<b>Density:</b>	1.02 – 1.03 g/ml *
<b>Solubility:</b>	Disperses
<b>Partition Coefficient:</b>	No data
<b>Auto-ignition Temperature:</b>	No data
<b>Decomposition Temperature:</b>	No data
<b>Viscosity:</b>	293 cst @ 20 C

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

**SECTION 10 - STABILITY AND REACTIVITY**

**PRODUCT REACTIVITY:** Do not mix or allow contact with oxidizing agents. Hazardous chemical reaction may occur.

**CHEMICAL STABILITY:** Stable, however may decompose if heated.

**HAZARDOUS REACTION/POLYMERIZATION:** Product will not undergo polymerization.

**CONDITIONS TO AVOID:** Avoid temperatures above 100°F (38°C) for prolonged period of time. Strong exothermic reaction can occur above 390°F (200°C)

**INCOMPATIBLE MATERIALS:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may generate Hydrogen chloride, Oxides of nitrogen and carbon.

### **SECTION 11 - TOXICOLOGICAL INFORMATION**

**ACUTE TOXICITY:**

Oral LD <sub>50</sub> (rat)	> 5,000 mg/Kg
Dermal LD <sub>50</sub> (rat)	> 5,000 mg/Kg
Inhalation LC <sub>50</sub> (rat)	> 2.14 mg/L
Eye Irritation (rabbit)	Minimal
Skin Irritation (rabbit)	Slight
Sensitization (guinea pig)	Not a contact sensitizer

**CARCINOGEN STATUS:**

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

**TERATOGENICITY:** No reproductive or teratogenic (birth defect) effects at normal exposure levels.

**MUTAGENICITY:** Little or no evidence of mutagenic effects during in vivo or in vitro studies.

### **SECTION 12 - ECOLOGICAL INFORMATION**

**ENVIRONMENTAL SUMMARY:** This pesticide is toxic to birds and aquatic invertebrates and toxic to fish. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Exposed treated seeds may be hazardous to birds. In the event that treated seeds are spilled and cannot be salvaged, completely cover them with soil. Do not contaminate water when disposing of equipment washwaters or rinsate.

**FATE:** Metalaxyl is moderately persistent with a soil half-life of 60 - 180 days depending on soil type and weather conditions. It is highly mobile in certain soil types. Fludioxonil is moderately persistent with a half-life of 120 - 240 days depending on soil pH and weather conditions. Low mobility in soil.

	<b>FISH TOXICITY</b>	<b>AVIAN TOXICITY</b>	<b>BEE TOXICITY</b>
Metalaxyl	96 hour LC <sub>50</sub> , Rainbow trout - > 100 mg/L 96 hour LC <sub>50</sub> , Bluegill - > 100 mg/L	Dietary CD <sub>50</sub> , Bobwhite quail - >10,000 ppm Dietary LC <sub>50</sub> , Mallard duck - >10,000 ppm	Contact LD <sub>50</sub> - > 25 ug/bee
Fludioxonil	96 hour LC <sub>50</sub> , Rainbow trout - 0.47 ppm 96 hour LC <sub>50</sub> , Bluegill - unknown	Dietary LD <sub>50</sub> , Bobwhite quail - > 2,000 ppm Dietary LC <sub>50</sub> , Mallard duck - unknown	Contact LD <sub>50</sub> - unknown

### **SECTION 13 - DISPOSAL CONSIDERATIONS**

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

**PESTICIDE 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 your EPA regional office for guidance.

**CONTAINER DISPOSAL:** Non-refillable container: Do not reuse or refill this container.. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Offer for recycling, if available or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refer to the product label for additional and complete Container Handling 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 –

Chronic, Immediate 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	1
	FLAMMABILITY	0
	PHYSICAL HAZARD	0
	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:** November, 2108

**REFERENCE:** Initial release