

SAFETY DATA SHEET



Revision date 06-Jul-2021

Revision Number 2

1. Identification

Product identifier

Product Name LEGUME PREMIX F2 RTU ST

Other means of identification

Product Code(s) 000083

Synonyms None

Registration Number(s) 42750-323

Recommended use of the chemical and restrictions on use

Recommended use Seed protectant

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)

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 Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide.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 4

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning

Hazard statements

Harmful if inhaled

**Appearance** Liquid**Physical state** Liquid**Odor** Faint**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell

Other information

May be harmful if swallowed. May be harmful in contact with skin. Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

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

Not applicable.

Mixture

| Chemical name | CAS No | Weight-% | Active Ingredient |
|------------------------------|-------------|-------------|-------------------|
| Red Colorant | 7023-61-2 | 19.40-20.60 | |
| Propylene Glycol | 57-55-6 | 7.60-8.40 | |
| Metalaxyl | 57837-19-1 | 5.19-5.73 | X |
| Fludioxonil | 131341-86-1 | 0.65-0.79 | X |
| 1,2-Benzisothiazol-3(2H)-one | 2634-33-5 | 0.14-0.17 | |
| Other Ingredients | PROPRIETARY | >60.00 | |

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

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

Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

| | |
|---|--|
| Skin contact | Wash skin with soap and water. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention. |
| 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. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information. |

Most important symptoms and effects, both acute and delayed

| | |
|-----------------|---|
| Symptoms | Coughing and/ or wheezing. Difficulty in breathing. |
|-----------------|---|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Note to physicians | 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 | No data available. |
| Explosion data | |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |
| Special protective equipment 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 breathing vapors or mists. Use personal protective equipment as required. |
| 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 breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. 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 |
|----------------------------|--|----------|-------|
| Fludioxonil 131341-86-1 | TWA: 1 mg/m ³ inhalable particulate matter | - | - |

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 No special protective equipment required.

Skin and body protection No special protective equipment required.

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 Do not eat, drink or smoke when using this product.

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state Liquid
Appearance Liquid
Color red; opaque
Odor Faint
Odor threshold No data available

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|-------------------|-------------------------|
| pH | 5.0 - 5.5 | @ 1% |
| Melting point / freezing point | No data available | |
| Boiling point / boiling range | No data available | |
| 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 | No data available | |
| Vapor density | No data available | |
| Relative density | No data available | |
| Water solubility | dispersible | |
| Solubility(ies) | No data available | |
| Partition coefficient | No data available | |
| Autoignition temperature | No data available | |
| Decomposition temperature | | |
| Kinematic viscosity | 293 cst @ 20 C | |
| Dynamic viscosity | No data available | |

Other information

| | |
|----------------------|--------------------|
| Explosive properties | No data available |
| Oxidizing properties | No data available |
| Softening point | No data available |
| Molecular weight | No data available |
| VOC Content (%) | No data available |
| Liquid Density | 1.02 – 1.03 g/ml * |
| Bulk density | No data available |

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

10. Stability and reactivity

| | |
|------------------------------------|---|
| Reactivity | No data available. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | Excessive heat. |
| 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. Harmful by inhalation. (based on components). |
| Eye contact | Specific test data for the substance or mixture is not available. |
| Skin contact | May be harmful in contact with skin. |

Ingestion May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Coughing and/ or wheezing.

Acute toxicity

Numerical measures of toxicity

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

Oral LD50 > 5,000 mg/kg

Dermal LD50 > 5,000 mg/kg

Inhalation LC50 > 2.14 mg/l

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|--|---|-----------------|
| Red Colorant 7023-61-2 | > 5000 mg/kg (Rat) | - | - |
| Propylene Glycol 57-55-6 | = 20 g/kg (Rat) | = 20800 mg/kg (Rabbit) | - |
| Metalaxyl 57837-19-1 | = 669 mg/kg (Rat) = 566 mg/kg (Rat) | > 6000 mg/kg (Rabbit) > 3100 mg/kg (Rat) | - |
| 1,2-Benzisothiazol-3(2H)-one 2634-33-5 | = 1020 mg/kg (Rat) | - | - |

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

Skin corrosion/irritation Slightly irritating to the skin.

Serious eye damage/eye irritation Mildly irritating.

Respiratory or skin sensitization Did not cause sensitization on laboratory animals.

Germ cell mutagenicity No data available.

Carcinogenicity No data available.

| Chemical name | ACGIH | IARC | NTP | OSHA |
|----------------------------|-------|------|-----|------|
| Fludioxonil 131341-86-1 | A3 | - | - | - |

Reproductive toxicity No data available.

STOT - single exposure No data available.

STOT - repeated exposure No data available.

Aspiration hazard No data available.

Other adverse effects No data available.

Interactive effects No data available.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|-----------------------------|---|---|----------------------------|--|
| Red Colorant 7023-61-2 | - | LC50: >100mg/L (96h, Danio rerio) | - | - |
| Propylene Glycol 57-55-6 | EC50: =19000mg/L (96h, Pseudokirchneriella subcapitata) | LC50: =51600mg/L (96h, Oncorhynchus mykiss) LC50: 41 - 47mg/L (96h, Oncorhynchus mykiss) LC50: =51400mg/L (96h, Pimephales promelas) LC50: =710mg/L (96h, Pimephales promelas) | - | EC50: >1000mg/L (48h, Daphnia magna) EC50: >10000mg/L (24h, Daphnia magna) |
| Metalaxyl 57837-19-1 | - | LC50: 13.6 - 30.8mg/L (96h, Oncorhynchus mykiss) LC50: 23 - 30mg/L (96h, Lepomis macrochirus) LC50: >100mg/L (96h, Cyprinus carpio) LC50: >100mg/L (96h, Poecilia reticulata) | - | - |

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

| Chemical name | Partition coefficient |
|---|-----------------------|
| 1,2-Benzisothiazol-3(2H)-one 2634-33-5 | 1.3 |

Other adverse effects No data 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.**14. Transport information****DOT** Not regulated**15. Regulatory information****U.S. EPA Label Information****EPA Pesticide Registration Number** 42750-323**EPA Pesticide Label** CAUTION Harmful if absorbed through skin. Causes moderate eye irritation.**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 |
| AICS | 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
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 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 does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|-----------------------------|------------|---------------|--------------|
| Water 7732-18-5 | - | - | X |
| Propylene Glycol 57-55-6 | X | - | X |

16. Other information

| | | | | |
|-------------|-------------------------|-----------------------|---------------------------|---|
| NFPA | Health hazards 2 | Flammability 0 | Instability 0 | Physical and chemical properties - |
| HMIS | Health hazards 2 | Flammability 0 | Physical hazards 0 | Personal protection X |

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 06-Jul-2021

Revision Note No data available.

Disclaimer

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End of Safety Data Sheet