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 : THIABENDAZOLE 4L ST
CHEMICAL NAME : Thiabendazole
PRODUCT USE : Fungicide
PRODUCT CODE : EPA Reg. No 42750-226

SECTION 2 - HAZARDS IDENTIFICATION SUMMARY

Off-white viscous liquid

HEALTH HAZARDS: Moderate eye irritant.

PHYSICAL HAZARDS: May release toxic fumes if burned.

ENVIRONMENTAL HAZARDS: Very toxic to aquatic life.

SECTION 3 - COMPOSITION, INFORMATION OF INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>PERCENTAGE</th>
<th>CAS NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiabendazole</td>
<td>42.3%</td>
<td>148-79-8</td>
</tr>
<tr>
<td>Other ingredients</td>
<td>57.7%</td>
<td>n/a</td>
</tr>
</tbody>
</table>

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 further 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.

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

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. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Dike and collect water used to fight fire to prevent environmental damage due to run off.

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 chloride, hydrogen cyanide, Oxides of nitrogen, carbon monoxide.

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!

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

HANDLING: Use only in a well-ventilated area. Wear appropriate safety equipment when handling.

STORAGE: Store in a cool, dry place away from food, drink, and animal feeding stuffs. Do not store below 32°F (0°C). Repeated product freezing and thawing should be avoided. Shake or stir product before use
SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA, ppm):

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA PEL</th>
<th>ACIGH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiabendazole</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

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: Mixers, loaders, applicators and other handlers must wear:

EYE PROTECT: Safety glasses or goggles recommended.

CLOTHING: Long-sleeved shirt and long pants, Shoes plus socks.

GLOVES: Handlers making application to mushroom houses using hand held sprayers must wear chemical resistant gloves.

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Off-white viscous liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Paint-like odor</td>
</tr>
<tr>
<td>pH</td>
<td>4.5 – 5.5</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No data</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 100°C</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data</td>
</tr>
<tr>
<td>Flammability</td>
<td>No data</td>
</tr>
<tr>
<td>Flammability Limits</td>
<td>No data</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>$5.3 \times 10^{-4}$ mPa (25°C)</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>$1.13 – 1.15$ g/ml (9.43 – 9.60 lb/gl)</td>
</tr>
<tr>
<td>Solubility</td>
<td>Emulsifies</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>log Pow = 2.39 (pH 7, 25°C)</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>No data</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data</td>
</tr>
<tr>
<td>Viscosity</td>
<td>145.2 cSt (20°C); 84.4 cSt (40°C)</td>
</tr>
</tbody>
</table>

*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: Hydrogen chloride, Oxides of nitrogen due to thermal decomposition.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity values from a similar but not identical formulation.

ACUTE TOXICITY:
Oral LD_{50} (rat) - >5,000 mg/Kg
Dermal LD_{50} (rat) - >5,000 mg/Kg
Inhalation LC_{50} (rat) - >2.1 mg/Kg
Eye Irritation (rabbit) - Slightly irritating
Skin Irritation (rabbit) - Slightly irritating
Sensitization (guinea pig) - Not a sensitizer

CARCINOGEN STATUS:
OSHA - Not listed
NTP - Not listed
IARC - Not listed

TERATOGENICITY: Limited evidence of developmental effects in animal studies

MUTAGENICITY: Studies indicate that thiabendazole is non-mutagenic

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This pesticide is toxic to fish. Do not apply when weather conditions favor runoff or drift from the target area. 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 contaminate water by cleaning of equipment or disposal of waste.

FATE: Thiabendazole is highly persistent with a soil half life of > 365 days depending on soil type and weather conditions. Relatively immobile in soil depending on organic content.

FISH TOXICITY: (technical)
96 hour LC_{50}, Rainbow trout – 0.56 ppm
96 hour LC_{50}, Bluegill – unknown

AVIAN TOXICITY: (technical)
Dietary LC_{50}, Bobwhite quail – > 10,000 ppm
Oral LD_{50}, Mallard duck - > 5,000 ppm

BEE TOXICITY: (technical) Non-toxic
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. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Refillable Container: Refill this container with pesticide only. Do not reuse this container for any other purpose.

Refer to the product label for additional and complete Container Handling instructions.

SECTION 14 - TRANSPORT INFORMATION

SHIPPING DESCRIPTION: Not regulated by DOT (Ground transport)

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 – Thiabendazole

CALIFORNIA PROP 65: Not listed

TSCA: This product is exempted from TSCA because it is solely for FIFRA regulated use.
SECTION 16 - OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS HAZARD RATINGS</th>
<th>HEALTH</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FLAMMABILITY</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PHYSICAL HAZARD</td>
<td>0</td>
</tr>
</tbody>
</table>

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.