Section 1. Product and Company Identification

Product Name  
Thiabendazole

Product ID  
T2930

Chemical Name  
(Marketing Names/Synonyms)  
MK-360; Thibenzone; Equizole; Mertect; Storite; TBZ; Tecto.

Supplier  
LKT Laboratories, Inc  
545 Phalen Blvd.  
St. Paul, MN 55130 USA  
Ph: 651-644-8424 Fax: 651-644-8357  
www.lktlabs.com - getinfo@lktlabs.com

Emergency Phone #  
1-800-424-9300

Section 2. Hazards Identification

GHS Classification  
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

GHS Label elements including precautionary statements

Pictogram

Signal word  
Warning

Hazard and precautionary statements  
Hazard statements  
H400 - Very toxic to aquatic life.  
H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements  
P273 - Avoid release to the environment.  
P391 - Collect spillage.  
P501 - Dispose of contents/container to an approved waste disposal plant.

HMIS Classification  
Health hazard: 1  
Chronic health hazard: 0  
Flammability: 0  
Physical hazard: 0

NFPA Rating  
Health hazard: 0  
Fire hazard: 0  
Physical hazard: 0

Potential Health Effects  
Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.  
Skin - May be harmful if absorbed through skin. May cause skin irritation.  
Eyes - May cause eye irritation.
## Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Formula</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingredient: Title Compound</td>
<td>( \text{C}_{10}\text{H}_7\text{N}_3\text{S} )</td>
<td>148-79-8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Formula Wt.</th>
<th>EC No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>201.25</td>
<td>205-725-8</td>
</tr>
</tbody>
</table>

## Section 4. First Aid Measures

### General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

### Eye Contact
Flush eyes with water as a precaution.

### Skin Contact
Wash off with soap and plenty of water. Consult a physician.

### Inhalation
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### Ingestion
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## Section 5. Firefighting Measures

### Flash Point
Not available.

### Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Firefighting Procedures
Wear self-contained breathing apparatus for fire fighting if necessary.

### Unusual Fire Hazards
Carbon oxides, nitrogen oxides (NOx), sulfur oxides.

## Section 6. Accidental Release Measures

### Personal Precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

### Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### Methods and materials for containment and cleanup
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## Section 7. Handling and Storage

### Handling
Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

### Storage Conditions

### Hazardous Decomposition Products
Not available.

### Other Remarks
Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

EXPOSURE CONTROLS
Contains no substances with occupational exposure limit values.
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

PERSONAL PROTECTION

Eye/face protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Solid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>White crystalline powder.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>300-303°C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in DMF and DMSO. Slightly soluble in alcohols and esters.</td>
</tr>
<tr>
<td>Volatility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and Reactivity

**Stability**

Stable under recommended storage conditions.

**Materials To Avoid**

Strong oxidizing agents.

**Hazardous Decomposition Products**

Not available.
Section 11. Toxicological Information

**Oral LD50** Mouse - 5.8 mg/kg

**Skin corrosion/irritation** Not available.

**Inhalation LC50** Not available.

**Serious eye damage/irritation** Not available.

**Dermal LD50** Not available.

**Respiratory or skin sensitization** Not available.

**Other information on acute toxicity** Not available.

**Germ cell mutagenicity** Not available.

**Reproductive Toxicity** Not available.

**Aspiration Hazard** Not available.

**Specific organ toxicity single exposure (GHS)** Not available.

**Synergistic effects** Not available.

**Specific organ toxicity repeated exposure (GHS)** Not available.

**Additional Information** To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Teratogenicity** Not available.

**Signs and symptoms of exposure** Not available.

**Potential Health Effects** Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.
Skin - May be harmful if absorbed through skin. May cause skin irritation.
Eyes - May cause eye irritation.
Ingestion - May be harmful if swallowed.

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Section 12. Ecological Information

**Toxicity**
- Toxicity to fish: LC50 - Oncorhynchus mykiss (rainbow trout) - 0.39 mg/l - 96.0 h
- Toxicity to daphnia & other aquatic invertebrates:
  - EC50 - Daphnia magna (Water flea) - 0.31 mg/l - 48h

**Mobility in soil** Not available.

**PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not
Section 13. Disposal Considerations

**Waste Disposal**
Dispose of material according to all federal, state and local regulations.
Offer material to a licensed, professional waste disposal company to dispose of as unused product.

Section 14. Transport Information

**DOT (US)**
UN number: 3077  
Class: 9  
Packing Group: III  
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Thiabendazole)

**IATA**
UN number: 3077  
Class: 9  
Packing group: III  
EMS No.: F-A, S-F  
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (2(Thiazole-4-yl)benzimidazole)

**IMDG**
UN number: 3077  
Class: 9  
Packing group: III  
EMS No.: F-A, S-F  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2(Thiazole-4-yl)benzimidazole)  
Marine pollutant: yes

Section 15. Regulatory Information

**SARA 302 Components**
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
SARA 313: The following components are subject to reporting levels established by SARA Title III, Section 313:  
Thiabendazole  
CAS No.: 148-79-8  
Revision Date: 2007-07-01

**SARA 311/312 Components**
No SARA hazards.

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**
Thiabendazole  
CAS No.: 148-79-8  
Revision Date: 2007-07-01

**New Jersey Right To Know Components**
Thiabendazole  
CAS No.: 148-79-8  
Revision Date: 2007-07-01

**California Prop 65 Components**
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

**Other information**
The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.