

MATERIAL SAFETY DATA SHEET			
Product Name	ALBENDAZOLE		
Synonym	Carbamic Acid, Albendazole oxide		
MSDS No.	MSDS/FP/A/001	Supersedes	NIL
Revision No.	00	Review Date	29/02/2012
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## ALBENDAZOLE

### 1: Chemical Product

**Product Name:** Albendazole

**Catalog Codes:** SLA3505

**CAS#:** 54965-21-8

**RTECS:** FD1100000

**TSCA:** TSCA 8(b) inventory: No products were found.

**CI#:** Not available.

**Synonym:** Carbamic acid,

(5-(propylthio)-1H-benzimidazol-2-yl), methyl ester

**Chemical Formula:** C12-H15-N3-O2-S

### 2: Composition and Information on Ingredients

#### Composition:

<u>Name</u>	<u>CAS #</u>	<u>% by Weight</u>
Albendazole	54965-21-8	100

**Toxicological Data on Ingredients: Albendazole:** ORAL (LD50): Acute: 2400 mg/kg [Rat]. 1500 mg/kg [Mouse]. 10000 mg/kg

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**3: Hazards Identification**

**Potential Acute Health Effects:** Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.

TERATOGENIC EFFECTS: Classified POSSIBLE for human.

DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE].

The substance may be toxic to blood.

Repeated or prolonged exposure to the substance can produce target organs damage.

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**4: First Aid Measures**

**Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Skin Contact:**

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin Contact:**

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek

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immediate medical attention.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not available.

**Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Serious Ingestion:** Not available.

**5: Fire and Explosion Data**

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** Not available.

**Flash Points:** CLOSED CUP: Higher than 93.3°C (200°F).

**Flammable Limits:** Not available.

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...).

**Fire Hazards in Presence of Various Substances:**

Slightly flammable to flammable in presence of heat.

Non-flammable in presence of shocks.

**Explosion Hazards in Presence of Various Substances:**

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Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

**6: Accidental Release Measures**

**Small Spill:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**7: Handling and Storage**

**Precautions:**

Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear

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suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23°C (73.4°F).

### **8: Exposure Controls/Personal Protection**

#### **Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

#### **Personal Protection:**

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

#### **Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

### **9: Physical and Chemical Properties**

**Physical state and appearance:** Solid. (Solidcrystalline powder.)

**Odor:** Not available.

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**Taste:** Not available.

**Molecular Weight:** 265.34 g/mole

**Color:** White to off-white

**pH (1% soln/water):** Not available.

**Boiling Point:** Not available.

**Melting Point:** 209°C (408.2°F)

**Critical Temperature:** Not available.

**Specific Gravity:** Not available.

**Vapor Pressure:** Not applicable.

**Vapor Density:** Not available.

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.

**Dispersion Properties:** Not available.

**Solubility:** Not available.

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**10: Stability and Reactivity Data**

**Stability:** The product is stable.

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**Instability Temperature:** Not available.

**Conditions of Instability:** Excess heat, incompatible materials

**Incompatibility with various substances:** Not available.

**Corrosivity:** Not available.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

### 11: Toxicological Information

**Routes of Entry:** Inhalation. Ingestion.

**Toxicity to Animals:** Acute oral toxicity (LD50): 1500 mg/kg [Mouse].

#### **Chronic Effects on Humans:**

MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.

TERATOGENIC EFFECTS: Classified POSSIBLE for human.

DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE].

May cause damage to the following organs: blood.

**Other Toxic Effects on Humans:** Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:**

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May cause adverse reproductive effects (fetotoxicity, post implantation mortality), developmental toxicity and birth defects (teratogenic) based on animal data. May affect genetic material

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects:

Skin: May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed. May affect blood (possible aplastic anemia).

Inhalation: Dust may cause respiratory tract irritation.

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**12: Ecological Information**

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product itself.

**Special Remarks on the Products of Biodegradation:** Not available.

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**13: Disposal Considerations**



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**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**14: Transport Information**

**DOT Classification:** Not a DOT controlled material

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

**15: Other Regulatory Information**

**Federal and State Regulations:** No products were found.

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications:**
**DSCL (EEC):**

R20/21/22- Harmful by inhalation, in contact with skin and if swallowed. R61- May cause harm to the unborn child. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S27- Take off immediately all contaminated clothing. S28- After contact with skin, wash immediately with plenty of [\*\*\*] S36/39- Wear suitable protective clothing and eye/face protection.

**Fire Hazard:** 1

**Reactivity:** 0

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**Personal Protection:** E

**Health:** 2

**Flammability:** 1

**Reactivity:** 0

**Specific hazard:**

**Protective Equipment:** Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

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**16: Other Information**

**References:** Not available.

**Other Special Considerations:** Not available.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes event shall.