

MATERIAL SAFETY DATA SHEET

PHENYLTHIOUREA
CAROLINA BIOLOGICAL

Revised: 09/12/07
Replaces: 07/16/04
Printed: 11/27/07

1. PRODUCT DESCRIPTION

Product Name: Phenylthiourea
Product Code(s): 88-1218, 88-1220
Size: 10 g, 100 g
Chemical Name: 1-Phenyl-2-thiourea
CAS Number: 103-85-5
Formula: C7-H8-N2-S
Synonyms: Phenylthiocarbamide; PTC
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec (Transportation Spill Response 24 hours): 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principal Hazardous Components: 1-Phenyl-2-thiourea (CAS#103-85-5)100%
TLV and PEL units: None established

3. HAZARD IDENTIFICATION

Emergency Overview: Very toxic if swallowed. Skin contact may cause sensitization.

Eyes: May cause irritation.

Skin: May cause irritation.

Ingestion: Very toxic - may be harmful or fatal if swallowed.

Inhalation: May cause irritation to respiratory tract. Shortness of breath or coughing may result. Higher exposure may result in pulmonary edema.

4. FIRST AID MEASURES

Emergency and First Aid Procedures:

Eyes - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.

Skin - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.

Ingestion - If swallowed, if conscious, give plenty of water.

Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

Inhalation - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm and quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point(Method Used): N/A

NFPA Rating: Not listed

Extinguisher Media:

Use media suitable to extinguish surrounding fire.

Flammable Limits in Air % by Volume: N/A

Autoignition Temperature: N/A

Special Firefighting Procedures:

Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards:

Thermal decomposition or contact with acids or acid fumes produces highly toxic fumes.

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6. SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled:

Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

7. SPECIAL PRECAUTIONS

Precautions to be Taken in Handling or Storing: Keep container tightly closed. Store at controlled room temperature.

Other Precautions: Do not breathe dust. Do not get in eyes, on skin, or on clothing.

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection(Specify Type):

None needed under normal conditions of use with adequate ventilation.

NIOSH approved equipment should be worn if PELs are exceeded.

Ventilation:

Local Exhaust: Yes

Mechanical(General): Yes

Special: No

Other: No

Protective Gloves:

Rubber, neoprene, PVC, or equivalent.

Eye Protection:

Splash proof chemical safety goggles should be worn at all times.

Other Protective Clothing or Equipment:

Lab coat, eye wash, and safety shower.

9. PHYSICAL DATA

Molecular Weight: 152.22
Melting Point: 154°C
Boiling Point: N/A
Vapor Pressure: N/A
Vapor Density(Air=1): N/A
Specific Gravity(H2O=1): 1.3
Percent Volatile by Volume: N/A
Evaporation Rate(H2O=1): N/A
Solubility in Water: Soluble
Appearance and Odor: Needle or prism-like crystals

10. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Heat, acid, or acid fumes

Incompatibility(Materials to Avoid): Acids

Hazardous Decomposition Products: NOx, SOx

Hazardous Polymerization: Will not occur

11. TOXICITY DATA

Toxicity Data: orl-rat LD50: 3 mg/kg

Effects of Overexposure:

Acute: See section 3

Chronic: Tests on laboratory animals indicate material may produce

adverse reproductive effects.

Conditions Aggravated by Overexposure: Poison! May be fatal if

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swallowed or inhaled. Harmful if absorbed through the skin.
Target Organs: Respiratory tract, skin
Primary Route(s) of Entry: Inhalation, ingestion or skin contact

12. ECOLOGICAL DATA

EPA Waste Numbers: P093

13. DISPOSAL INFORMATION

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations.
Always contact a permitted waste disposer (TSD) to assure compliance.

14. TRANSPORT INFORMATION

Description: Toxic Solid,organic,n.o.s.(Phenylthiourea), 6.1, UN2811, I

15. REGULATORY INFORMATION

EPA TSCA Status: On TSCA Inventory
Hazard Category for SARA Section 311/312 Reporting: Acute

Product or Components	SARA EHS Sec. 302 TPQ	SARA Sec. 313 Chemicals		CERCLA Sec. 103 RQ lbs.	RCRA Sec. 261.33
		Name List	Chemical Category		

1-Phenyl-2-thiourea	Yes	No	No	100/10000	No
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16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH.....American Conference of Governmental Industrial Hygienists
CAS Number..Chemical Abstracts Service Number
CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act
DOT.....U.S. Department of Transportation
IARC.....International Agency of Research on Cancer
mppcf.....million particles per cubic foot
N/A.....Not Available
NTP.....National Toxicology Program
OSHA.....Occupational Safety and Health Administration
PEL.....Permissible Exposure Limit
ppm.....parts per million
RCRA.....Resource Conservation and Recovery Act
SARA.....Superfund Amendments and Reauthorization Act
TLV.....Threshold Limit Value
TSCA.....Toxic Substances Control Act