

Safety Data Sheet

Phenylthiourea

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Phenylthiourea
Recommended Use: Science education applications
Synonyms: Phenylthiocarbamide, PTC
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER



Fatal if swallowed. May cause an allergic skin reaction.

GHS Classification:

Acute Toxicity - Oral Category 1, Skin Sensitisation Category 1

Acute Toxicity Dermal Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Gas Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Vapor Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Dust/Mist Contains	100 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Phenylthiourea	103-85-5	100

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Section 5 Firefighting Procedures

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid.

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Fire Fighting Methods and Protection:	Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards:	Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products:	Carbon dioxide, Carbon monoxide, Sulfur Oxides, Nitrogen oxides

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:	Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Avoid contact with clothing. Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Avoid creating and inhaling dust. Ventilate the contaminated area. Isolate area. Keep unnecessary personnel away. Evacuate the area promptly. A large(uncontrolled) release should only be handled by a specially trained spill brigade or by a qualified contractor. Reduce airborne dust and prevent scattering by moistening with water Vacuum or sweep up material and place in a disposal container Ensure clean-up measures are in compliance with OSHA (29 CFR 1910.120). Do not allow the spilled product to enter public drainage system or open waterways.
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Section 7 Handling and Storage

Handling:	Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do no eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Keep container tightly closed in a cool, well-ventilated place.
Storage:	Store locked up. Do not breathe dust/vapor. Do not get in eyes, on skin, or on clothing. Retained residue may make empty containers hazardous; use caution.
Storage Code:	Blue - Toxic. Store separately in a secured area.

Section 8 Protection Information

<u>Chemical Name</u>	<u>ACGIH</u>	<u>OSHA PEL</u>
No data available	(TWA) N/A (STEL) N/A	(TWA) N/A (STEL) N/A

Control Parameters	
Engineering Measures:	No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.
Personal Protective Equipment (PPE):	Lab coat, apron, eye wash, safety shower.
Respiratory Protection:	No respiratory protection required under normal conditions of use. Follow a respiratory protection program that meets 29 CFR 1910.134 and ANSI Z88.2 requirements whenever work place conditions warrant the use of a respirator.
Respirator Type(s):	NIOSH approved air purifying respirator with dust/mist filter.
Eye Protection:	Wear chemical splash goggles when handling this product. Have an eye wash station available.
Skin Protection:	Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
Gloves:	Nitrile

Section 9 Physical Data

Formula: C ₆ H ₅ NHCSNH ₂	Vapor Pressure: N/A
Molecular Weight: 152.22	Evaporation Rate (BuAc=1): N/A
Appearance: Crystals	Vapor Density (Air=1): N/A
Odor: No data available	Specific Gravity: 1.3
Odor Threshold: No data available	Solubility in Water: Soluble
pH: No data available	Log Pow (calculated): No data available
Melting Point: 154 C	Autoignition Temperature: No data available
Boiling Point: No data available	Decomposition Temperature: No data available

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Flash Point: No data available
Flammable Limits in Air: N/A

Viscosity: No data available
Percent Volatile by Volume: N/A

Section 10

Reactivity Data

Reactivity: No data available
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: None known.
Incompatible Materials: Caustics (bases), Strong acids, Strong oxidizing agents
Hazardous Decomposition Products: Nitrogen oxides, Sulfur Oxides, Carbon dioxide, Carbon monoxide
Hazardous Polymerization: Will not occur

Section 11

Toxicity Data

Routes of Entry: Inhalation, ingestion, eye or skin contact.
Symptoms (Acute):
Delayed Effects: No data available

Acute Toxicity:	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Chemical Name Phenylthiourea	103-85-5	Oral LD50 Rabbit 40 mg/kg Oral LD50 Mouse 10 mg/kg Oral LD50 Rat 3 mg/kg	Not determined	Not determined

Carcinogenicity:	CAS Number	IARC	NTP	OSHA
Chemical Name No data available	103-85-5	Not listed	Not listed	Not listed

Chronic Effects:
Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: Evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: See Section 2, Respiratory system, Skin
Chronic: Reproductive data cited.

Section 12

Ecological Data

Overview: This material is not expected to be harmful to the ecology. Keep out of waterways.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Phenylthiourea	103-85-5	Aquatic LC50 (48h) Daphnia = 59 MG/L

Section 13

Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14

Transport Information

Ground - DOT Proper Shipping Name:
UN2811, Toxic Solid, organic, n.o.s. (Phenylthiourea), 6.1, I

Air - IATA Proper Shipping Name:
UN number: 2811 Class: 6.1 Packing group: I Proper shipping name: Toxic solid, organic, n.o.s. (Phenyl-2-thiourea)

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Section 15

Regulatory Information

TSCA Status:

All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Phenylthiourea	103-85-5	No	No	100 lb final RQ; 45.4 kg final RQ	100 lb lower TPQ; 10000 lb upper TPQ	No

Section 16

Additional Information

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Replaces: 09/03/2014

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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.

Glossary

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