GARDENA, CA
NEW BRUNSWICK, NJ

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
1 / 1 / 0	Health Hazard 1 Fire Hazard 1 Reactivity 0	See Section 15.

Section 1. Chemical Product and Company Identification

Common Name/ Trade Name	**6-Propyl-2-thiouracil**	**Catalog Number(s).**	P2221, P2075
		CAS#	51-52-5
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	**RTECS**	YR1400000
		TSCA	TSCA 8(b) inventory: 6-Propyl-2-thiouracil
Commercial Name(s)	Not available.	**CI#**	Not available.
Synonym	2,3-Dihydro-6-propyl-2-thioxo-4-(1H)-pyrimidinone; 2-Mercapto-4-hydroxy-6-n-propylpyrimidine; 2-Mercapto-6-propyl-4-pyrimidone; 2-Mercapto-6-propylpyrimid-4-one 2-Thio-4-oxo-6-propyl-1,3-pyrimidine; 2-Thio-6-propyl-1,3-pyrimidin-4-one; 4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-; 4-Propyl-2-thiouracil; 6-n-Propyl-2-thiouracil; 6-n-Propylthiouracil; 6-Propylthiouracil 6-Thio-4-propyluracil; Procasil; Propacil; Propilthiouracil; Propycil Propyl-thiorist; Propylthiouracil; Propyl-thyracil; Prothiucil; Prothiurone Prothyran; Protiural; Thiuragyl	**IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300** CALL (310) 516-8000	
Chemical Name	Uracil, 6-propyl-2-thio		
Chemical Family	Not available.		
Chemical Formula	C7-H10-N2-O-S		
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248		

Section 2.Composition and Information on Ingredients

		Exposure Limits			
Name	**CAS #**	**TWA (mg/m^3)**	**STEL (mg/m^3)**	**CEIL (mg/m^3)**	**% by Weight**
1) {6-}Propyl-2-thiouracil	51-52-5				100

Toxicological Data on Ingredients

6-Propyl-2-thiouracil:
ORAL (LD50): Acute: 1250 mg/kg [Rat].

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Section 3. Hazards Identification

Potential Acute Health Effects	Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
Potential Chronic Health Effects	**CARCINOGENIC EFFECTS**: Classified 2B (Possible for human.) by IARC. **MUTAGENIC EFFECTS**: Mutagenic for bacteria and/or yeast. **TERATOGENIC EFFECTS**: Not available. **DEVELOPMENTAL TOXICITY**: Not available. The substance may be toxic to blood, liver, thyroid. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 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. Cold water may be used. WARM water MUST be used. Get medical attention if irritation occurs.
Skin Contact	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
Serious Skin Contact	Not available.
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.

Section 5. Fire and Explosion Data

Flammability of the Product	May be combustible at high temperature.
Auto-Ignition Temperature	Not available.
Flash Points	Not available.
Flammable Limits	Not available.
Products of Combustion	These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of heat.
Explosion Hazards in Presence of Various Substances	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	As with most organic solids, fire is possible at elevated temperatures. When heated to decomposition it emits toxic fumes of nitrogen oxide and sulfur oxide.
Special Remarks on Explosion Hazards	Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

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Section 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.

Section 7. Handling and Storage

Precautions	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, alkalis.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Sensitive to light. Store in light-resistant containers.

Section 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	Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Dust respirator is recommended when ventilation is not adequate and handling of material causes generation of visible dust clouds. 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.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Crystalline powder.)	**Odor**	Odorless.
Molecular Weight	170.23 g/mole	**Taste**	Bitter.
pH (1% soln/water)	Not available.	**Color**	White.

Boiling Point	Not available.
Melting Point	218°C (424.4°F) - 221 C.
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	Partially soluble in hot water. Very slightly soluble in cold water. Insoluble in diethyl ether.

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Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat, incompatible materials, dust generation
Incompatibility with various substances	Reactive with oxidizing agents, acids, alkalis.
Corrosivity	Not available.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 1250 mg/kg [Rat].
Chronic Effects on Humans	**CARCINOGENIC EFFECTS**: Classified 2B (Possible for human.) by IARC. **MUTAGENIC EFFECTS**: Mutagenic for bacteria and/or yeast. May cause damage to the following organs: blood, liver, thyroid.
Other Toxic Effects on Humans	Slightly 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	May cause adverse reproductive effects and birth defects (teratogenic). May affect genetic material (mutagenic). May cause cancer. Human: passes through the placenta, excreted in maternal milk. It is capable of cause fetal hypothyroidism and goiter.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation. Ingestion: It can cause headache, nausea, abdominal discomfort, dizziness, drowsiness, loss of taste and it can suppress thyroid function. Effects on the liver (hepatits, jaundice, increase in liver function enzymes), and kidneys (nephritis), blood (agranulocytosis, coumarin-like anticoagulant effect, aplastic anemia, pancytopenia, hemolytic anemia) may occur but are rarer with acute exposure. Chronic Potential Health Effects: Ingestion: Chronic exposure to lower doses in the absence of underlying hyperthyroidism would be expected to depress thyroid function and result in hypothyroidism. It can also affect the liver and kidneys. Chronic ingestion can produce immunological reactions including agranulocytosis, milder leukopenias, thrombocytopenia, eosinophilia, pancytopenia, aplastic anemia, hemolytic anemia, vasculitis, pleuritis, lupus-like syndrome, arthritis, and hepatitis. Other symptoms may include decreased resistance to infections, purpuric, papular rash, stiffness in joints (arthritis), paresthesias, headache, nausea, loss or depigmentation of hair, drug fever, abdominal discomfort, dizziness, loss of taste, drowsiness, nephritis. Respiratory distress syndrome, productive cough, hemoptysis and pulmonary lesions may also occur.

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Section 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.

Section 13. Disposal Considerations

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

Section 14. Transport Information

DOT Classification	Not a DOT controlled material (United States).
Identification	Not applicable.
Special Provisions for Transport	Not applicable.
DOT (Pictograms)	

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations	California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: 6-Propyl-2-thiouracil California prop. 65 (no significant risk level): 6-Propyl-2-thiouracil: 0.0007 mg/day (value) California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: 6-Propyl-2-thiouracil Illinois toxic substances disclosure to employee act: 6-Propyl-2-thiouracil New York release reporting list: 6-Propyl-2-thiouracil Rhode Island RTK hazardous substances: 6-Propyl-2-thiouracil Pennsylvania RTK: 6-Propyl-2-thiouracil Minnesota: 6-Propyl-2-thiouracil Massachusetts RTK: 6-Propyl-2-thiouracil New Jersey: 6-Propyl-2-thiouracil California Director's List of Hazardous Substances: 6-Propyl-2-thiouracil TSCA 8(b) inventory: 6-Propyl-2-thiouracil
California Proposition 65 Warnings	California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: 6-Propyl-2-thiouracil California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.
Other Regulations	

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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 (EINECS No. 200-103-2).
Canada: Listed on Canadian Non-Domestic Substance List (NDSL).
China: Not listed on National Inventory.
Japan: Listed on National Inventory (ENCS).
Korea: Listed on National Inventory (KECI).
Philippines: Listed on National Inventory (PICCS).
Australia: Listed on AICS.

Other Classifications

WHMIS (Canada) CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC) R22- Harmful if swallowed.
R40- Limited evidence of a carcinogenic effect.
S46- If swallowed, seek medical advice immediately and show this container or label.

HMIS (U.S.A.)

Health Hazard	1
Fire Hazard	1
Reactivity	0
Personal Protection	E

National Fire Protection Association (U.S.A.)

WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

TDG (Canada) (Pictograms)

ADR (Europe) (Pictograms)

Protective Equipment

Gloves.

Lab coat.

Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Safety glasses.

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Section 16. Other Information

MSDS Code	3955H
References	Not available.
Other Special Considerations	Medication. Antithyroid drug. It is used theraputicallly to suppress thyroid function.

Validated by Sonia Owen on 6/8/2009.	**Verified by Sonia Owen.** **Printed 6/8/2009.**

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.