

WESTERN RESERVE CHEMICAL

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MATERIAL SAFETY DATA SHEET

ETU

CAS #

96-45-7

1. Product Identifications

Product Name: ETU
Chemical Name: Ethylene Thiourea
Formula: $C_3H_6N_2S$

2. Physical Description/Properties

Specific Gravity: 1.22
Melting Point (C° Min): 192
Bulk Density (kg/m³): n.a.
Appearance: Off-white powder/oil treated powder
Odor: No noticeable odor
Solubility: Very soluble in hot water; slightly soluble in cold water, methanol, ethanol, ethylene glycol, pyridine, acetic acid, naphthalene; insoluble in acetone, ether, chloroform, benzene.

3. Hazard Information

WARNING: Listed as a carcinogen (NTP, IARC, OSHA)

Combustible dust

Eye irritant-Avoid eye contact. Eye contact with dust can cause irritation to eyes such as itching, reddening, tearing and burning. Eye contact with vapors from this material can cause severe eye irritation.

Skin contact- Avoid skin contact. Repeated or prolonged skin contact may cause skin irritation or skin sensitization effect in susceptible individuals.

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Inhalation- Inhalation of dust must be avoided. ETU may have effects on the thyroid and liver. Animal tests show that this substance could possibly cause malformations in human babies.

Ingestion- Avoid ingestion. This material is considered moderately toxic by ingestion.

4. First Aid Information

- Skin:** Wash affected areas of skin with soap and running water. If irritation develops, seek medical attention. Do not reuse contaminated clothing without laundering.
- Ingestion:** Immediately contact a physician or a Poison Control Center. Do not give anything orally to an unconscious or convulsing person. If the victim is convulsing or unconscious, ensure that the victim's airway is open, lay the victim on his/her side with the head lower than the body, and immediately transport the victim to a hospital.
- Eyes:** Irrigate eye with water for 15 minutes. Remove contact lenses to ensure thorough flushing. Seek medical attention.
- Inhalation:** Remove person to fresh air. Get immediate medical attention if breathing is difficult or short.

5. Handling and Storage

General: Maintain good housekeeping to prevent dust accumulation. Avoid contact with eyes, skin and clothing. Control inventory, use oldest material first, and store in a cool, dry, well ventilated area. Avoid ignition sources such as sparks and flame.

6. Employee Protection Recommendations

The employee should wear protective clothes and avoid direct physical contact with the product.

Eye Protection: Wear chemical safety glasses or goggles

Hand Protective Requirements: Wear protective gloves.

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Skin Protective Requirements: Wear protective clothing to prevent Skin contact. Wash exposed skin With soap/water, launder clothing before use.

Ventilation: Local exhaust

7. Toxicological Information

LD50 acute oral for rats: >265mg/kg

8. Fire and Explosion Data

Flash point: Not available
Extinguish Method: Water spray, dry chemical, carbon dioxide or foam extinguishing agents.
Fire Fighting Instructions: Wear self-contained, positive pressure breathing apparatus (SCABA) and full fire fighting protective clothing. Do not allow contamination water to enter storm drains or waterways.
Combustion Products: Thermal decomposition produces toxic oxides of carbon, nitrogen, and sulfur.

9. Reactivity

The material is considered stable at ambient temperatures and atmospheric pressures. It is not self reactive. Hazardous polymerization does not occur.

Substances to Avoid: Oxidizing agent, acids, bases

10. Accidental Release and Disposal

Waste disposal: In its unused condition, this material is a HAZARDOUS WASTE as defined by the Resource Conservation and Recovery Act (RCRA), 40 CFR 261. RCRA waste number U116. Material that cannot be used or chemically reprocessed should be disposed at an approved facility in accordance with all applicable local, state and federal regulations. Incineration is recommended.

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11. Transportation Information

DOT Status: Class 9
DOT Shipping name: Environmentally Hazardous substance, Solid,
NOS (ethylene, thiourea), 9, UN3077, PG
111.
DOT reportable qty. (lbs): 10.0
UN/NA number: 3077

12. Regulatory Information

Worldwide Inventory Status

TSCA (USA): Listed
Canadian DSL: Listed
Canadian NDSL: Not Applicable. Listed on the DSL.
EINECS/ELINCS (Europe): Listed
Japanese Inventory (ENCS): Listed
Korean Chemical Inventory
(ECL): Listed
Australian Chemical Inventories
(AICS): Listed
New Zealand (NZ): Listed
Phillipines (PICCS) Inventory: Listed
China (CLECS): Listed
US Regulatory Rules
SARA Section 302: None
SARA 311/312 Hazard Immediate Health Hazard

Categories:

SARA 313 Chemical: As Ethylene Thiourea DeMinimis
Concentration 0.1%
RCRA Status: HAZARDOUS WASTE
Other Regulations:
California Proposition 65: Carcinogen and Developmental Toxin
New Jersey Right-to-Know List: Listed Ethylene Thiourea

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Pennsylvania Right to Know List: Ethylene Thiourea

Florida Right to Know: NA

Minnesota Right to Know: Listed

MA Right to Know Law: Ethylene Thiourea

FDA Status 21 CFR: Prohibited from use in 21CFR.

Canadian Regulations

WHMIS Hazard Class: D1B VERY TOXIC MATERIALS. D2A
VERY TOXIC MATERIALS D2B

TOXIC MATERIALS/ Materials
Causing Other Toxic Effects.

NPRI: Listed

13. Other Information

HMIS Classification Health 2 Flammability 1 Reactivity 0

Important Note: The information provided is without warranty regarding its accuracy or completeness. The information may not be valid under all conditions. The user has the final responsibility for determining the suitability of the product in a given application.

5/06