



COMERCIPOL

HOJA DE SEGURIDAD ETU

2. COMPOSITION:

Substance:

Common chemical name: Ethylene Thiourea
Synonyms: NA-22
CAS No.: 96-45-7
Product code / EC-number: 202-506-9
Chemical nature: Thiourea
Formula: $C_3H_6N_2S$

3. HAZARDS IDENTIFICATION

Symbol(s): Xi, Xn
Risk-phrase(s): R 22, R36/37/38, R62

4. FIRST-AID MEASURES:

Symptoms: Dust may cause respiratory tract irritation. Repeated contact may cause skin sensitization. Harmful if swallowed

First aid

Skin: Wash immediately with soap and water.
Eye: Rinse immediately with plenty of water.
Inhalation: Move to fresh air.
Ingestion: Give plenty of water to drink.
In all cases seek medical advice if irritation develops.

5. FIRE-FIGHTING MEASURES:



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Extinguishing media: Water mist, dry powder, foam, carbon dioxide.
Protective equipment: Wear a self-contained breathing apparatus.
Exposure hazards: Emits toxic fumes under fire.
Further information: Protect from sparks (dust explosion risk). Collect contaminated fire fighting water separately, must not be discharged into the drains.

6. ACCIDENTAL RELEASE MEASURES:

Avoid discharge into environment. Avoid breathing dust, if dust formation use dust mask. Ensure good ventilation. Wear protective gloves, glasses and clothing.

7. HANDLING AND STORAGE:

Handling: Avoid breathing dust, vapor, mist, or gas. Avoid contact with eyes, skin, and clothing. Keep dry, avoid crash when transporting. Avoid dust accumulation.
Storage: Store in a dry and cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Exposure limits: No exposure limit has been established.
Personal protection: see Section 6

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: white powder
Melting point/range: 193 °C
Flash point: not determined
Flammability: not determined
Autoignition temperature: not determined
Solubility: Soluble in alcohol, lightly soluble in water.
Application: It has little tendency to scorch, a high degree of processing safety and enables proper vulcanization to be attained speedily at normal vulcanizing temperature. Presents characteristics vulcanization kinetics and gives the vulcanization with excellent physical properties (high tensile strength, low compression set, large plasticity and



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Low explosion limit: good heat resistance
Not determined
Density: appx. 1180 kg/m³ (20°C)

10. STABILITY AND REACTIVITY:

Stability: Stable under normal temperatures and pressures.

11. TOXICOLOGICAL INFORMATION:

Acute toxicity

Oral LD₅₀: Rat: > 350 mg/kg.
Dermal LD₅₀: Rabbit: > 2000 mg/kg.

Irritating to eyes and skin. 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 may cause skin irritation or skin sensitization effect in susceptible individuals.

Ingestion of ethylene thiourea may cause metallic taste followed by vomiting, diarrhea and collapse. Ethylene thiourea crosses the placenta and may cause birth defects.

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 body.

12. ECOLOGICAL INFORMATION:

Toxicity: Fish 96 h-LC50 *Lepomis macrochirus*: 9.6 mg/l
Daphnia 48 h-EC50 *Daphnia magna*: 17 mg/l

13. DISPOSAL CONSIDERATIONS:

Avoid recycling the packages. This material and its container must be disposed of as a hazardous waste. Waste from residues and package should be collected together and handled according to local regulations.

14. TRANSPORT INFORMATION:

In strict accordance with <<INCOTERMS 2000>>.
Oversea transport IMO: Not restricted Packing group: III
EMS: Not relevant
Shipping name: Environmentally Hazardous substance solid.



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Class: 9
Subsidiary risk: No

15. OTHER REGULATORY INFORMATION:

Labeling:



Symbol(s):

HARMFUL (Xn) (Xi)

R(isk) phrase(s):

R22 Harmful if swallowed
R 36/37/38 Irritating to eyes, respiratory system and skin
R 62 Possible risk of impaired fertility

S(afety) phrase(s):

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S 36/37/39 Wear suitable gloves protective clothing, gloves and eye/face protection
S 61 Avoid releasing to the environment.

16. OTHER INFORMATION

Revision: 1/2010 of March 15, 2010.

Nota:

La información suministrada en este documento se ha recopilado con base a las fuentes existentes, de acuerdo con los conocimientos disponibles y con los requerimientos legales vigentes, sin embargo, esto no implica que el contenido sea exhaustivo por tanto es responsabilidad del usuario determinar la validez de esta información para su aplicación en cada caso.