



MATERIAL SAFETY DATA SHEETS

259

Ethyl thiocyanate

1. CHEMICAL IDENTITY

Chemical Name : Ethyl thiocyanate

Chemical Classification: Flammable

Trade Name :

Synonyms: Ethyl sulfocyanate, Thiocyanic acid, ethyl ester

Formula : C₃H₅NS

CAS No: 542-90-5

UN No: 1992

Regulated Identification

Shipping Name : Poisonous liquid

Hazchem Code : 3W

Codes / Label : Class 3, Flammable

Hazardous Waste ID No : 17

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
1 Ethyl thiocyanate	542-90-5	3	
2		4	

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C: 146

Physical State: Liquid

Appearance: Volatile liquid

Melting Pt °C: - 85.5

Vapour Pressure @ 35°C mmHg: 5 (25 deg C)

Odour: Onion-like

Vapour Density(Air =1): 3.01

Solubility in water at 30°C g/100ml: Insoluble

Others: Miscible with alcohol and ether.

Specific Gravity (Water =1): 1.0071 @ 23 deg C

pH :

3. FIRE / EXPLOSION HAZARD DATA

Flammability : Yes

LEL:

Flash Point °C in OC:

TDG Flammability:

UEL:

Flash Point °C in CC: 42

Autoignition Temperature °C :

Explosion sensitivity to impact:

Explosion sensitivity to static Electricity:

Hazardous Combustion Products : When decomposed, toxic gases and vapours (NO_x, SO_x) are released.

Hazardous Polymerization :

Combustible Liquid: Yes

Explosive Material: No

Corrosive Material No

Flammable Material: Yes

Oxidiser : No

Others:

Pyrophoric Material: No

Organic Peroxide : No

4. REACTIVITY DATA

Chemical Stability : Stable

Incompatibility with other material : Oxidisers

Reactivity : Violent reactions may occur when mixed with chlorates, nitrates, organic peroxides, peroxides.

Hazardous : Toxic gases (NOx. SOx)

Reaction Products

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, Ingestion, Skin and Eyes

Effects of Exposure / Symptoms:

Prolonged absorption may produce various skin eruptions, running nose and occasionally dizziness, cramps, nausea, vomiting and mild or severe disturbances of the nervous system. This is not normally dissociated into cyanide.

Emergency Treatment :

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Skin: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Do not allow victim to rub or keep eyes closed.

Ingestion: Get medical aid. Do not induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

LD50 (oral-rat) mg/kg: 200 mg/kg

STEL:

LC50 (rat) mg/kg:

Odour Threshold:

Permissible Exposure Limit:

TLV (ACGIH) :

NFPA Hazard	Health	Flammability	Reactivity	Special
Signals	2	3	0	

6. PREVENTIVE MEASURES

Personal Protective Equipment : Imperious clothing, gloves, face-shields, splash-proof goggles

Handling : Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation. Do not allow contact with water. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep from contact with moist air and steam.

Storage : Store in a cool, dry, well-ventilated location away from strong oxidisers and peroxides.

Precautions :

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media : Dry chemical, foam and carbon dioxide

Special Procedure : If there is a fire in the vicinity of this chemical, keep the containers cool by spraying water.

Unusual Hazards :

EXPOSURE: First Aid Measures:

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

- Skin:** Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
- Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Do not allow victim to rub or keep eyes closed.
- Ingestion:** Get medical aid. Do not induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Antidotes / Dosages:

SPILLS :

Steps To Be Taken : Ventilate the area of spill. Absorb on a paper and transfer to a container for eventual disposal. Wash the surface with detergent and water.

Waste Disposal Method: The spilled material in closed containers may be disposed of in a secured landfill.

8. ADDITIONAL INFORMATION / REFERENCES

9. MANUFACTURERS / SUPPLIERS DATA

NAME OF FIRM :	Contact person
MAILING ADDRESS :	in Emergency :
TELEPHONE / TELEX NOS :	Local Bodies involved :
TELEGRAPHIC ADDRESS :	Standard Packing :
OTHERS :	Trem Card Details / Ref :

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