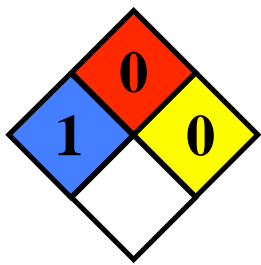


### Thiourea Reagent Grade, *Synonyms:* Thiocarbamide, Sulfoarea, USAF EK-497, THU,

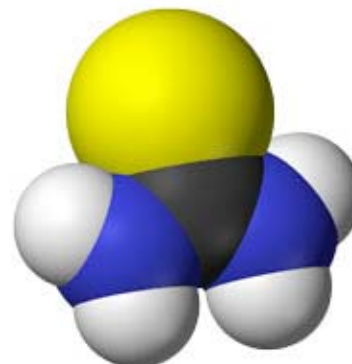
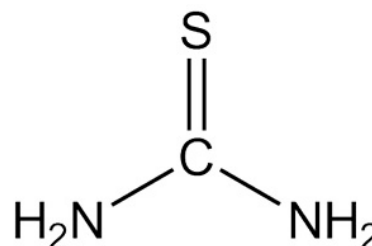
Industrial uses of thiourea include production of flame retardant resins, and vulcanization accelerators. Thiourea is used as an auxiliary agent in diazo paper (light-sensitive photocopy paper) and almost all other types of copy paper. A leaching agent for gold leaching and silver leaching can be created by selectively oxidizing thiourea, bypassing the steps of cyanide use and smelting. Another common application for use of thiourea is a common sulfur source for making semiconductor cadmium sulfide nanoparticle. A slurry of 1 g cadmium sulfate (1.3 mmol), 0.5 g thiourea (6.6 mmol), and 0.1 g SiO<sub>2</sub> (1.7 mmol) were sonicated for 3 hours under ambient air at room temperature. The colorless slurry solution changes to yellow indicating the generation of CdS.

### Typical Parameters:

Molecular Formula	CH <sub>4</sub> N <sub>2</sub> S	<b>NFPA 704</b>  
Physical State	White Granulated Powder	
Assay	99.0% Min	
Molecular Weight	76.12	
CAS Number	62-56-6	
EINECS #	200-543-5	
Density	1.405 g/ml	
Melting Range	174 – 177 °C	
Solubility	0.18g/ml at 20 °C	
Residue on Ignition	0.1% max	
Loss on Drying	0.5% max	

### Quality Specifications:

Trace metal Impurities	Industry Standard	Our Results
Aluminum, Al	30 ppm	5 ppm
Barium, Ba	30 ppm	2 ppm
Calcium, Ca	30 ppm	21 ppm
Chromium, Cr	30 ppm	<1 ppm
Copper, Cu	30 ppm	<1 ppm
Iron, Fe	30 ppm	2 ppm
Lead, Pb	30 ppm	1 ppm
Lithium, Li	30 ppm	15 ppm
Magnesium, Mg	30 ppm	10 ppm
Manganese, Mn	30 ppm	6 ppm
Nickel, Ni	30 ppm	<1 ppm
Potassium, K	30 ppm	5 ppm
Sodium, Na	30 ppm	1 ppm
Strontium, Sr	30 ppm	10 ppm
Titanium, Ti	30 ppm	2 ppm
Zinc, Zn	30 ppm	8 ppm



**Availability:** 25 Kg, 50Kg, 100Kg in Fiber Drums

**Shipment:** Freight classification: Hazard class 6.1. Packing group III. UN # 2811

**Storage** Keep in a tightly closed container. Store in a cool, dry, ventilated area.

<sup>(1)</sup>**Disposal:** Dispose of in accordance with local, state, & federal regulations. For assistance with disposal contact NuGeneration Technologies at 888-99-Nugen or e-mail: [nicg@nugentec.com](mailto:nicg@nugentec.com).