AQUABOND
Chemistry for Tomorrow

Summary Technical Data Sheet

Thiourea

Product Name: Thiourea

CAS: 62-56-6

Formula: CH_4N_2S

Molecular formula: 76.12

Appearance: white crystal

Odor: odorless

Solubility in water: 36 g/100 mL (20 °C)

Product Specifications

Properties	Specifications
Purity (HPLC)	99%.Min
Water Insolubles	0.02% Max
Melting Point	171° C Min
Moisture	0.4% Max
Ash Content	0.10% Max
Sulfohodanide (CNS)	0.02% Max

Thiourea, an organic additive plays a role in copper deposition and its application in the decorative electroplating and fashion accessory industries. The function of thiourea acts as a brightener agent. Thiourea (TU) in the amounts up to 60 ppm in the plating solution acts as a grain refinement on the substrate surface resulting in an improvement of the aesthetic appearance on the coating. This has been documented in the finishing literature. TU has been used in the electrorefining process to purify several metals to ensure a morphological smooth copper deposit. Regular restrictions on lead (Pb) in Sn(Pb) solderable coatings has lead to whisker free alternatives such as Cu-Sn based using TU as a strong complexing action to electro-deposit copper together with tin.

It also finds application as mould inhibitor and rubber accelerator.

Storage and Handling: Keep containers tightly closed in a cool, dry, well ventilated place.

Packaging: 55 lb/25 kg bags.

Transport Regulations: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (THIOUREA) UN 3077, Class 9, Packing Group III

The above information, while not guaranteed, reflects our analysis and believed to be accurate. It is the end user's responsibility, prior to use of the above mentioned product to determine the suitability of the product. Aqua Bond shall not be, directly or indirectly responsible for damages of any nature whatsoever resulting from the use or reliance upon the above information.

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