

**Chemical Name:** Thiourea Dioxide

**Trade Name:** POLYCLEAR

**Brand:** YANTAI DASTECK

**Synonyms:** Formamidine Sulfinite Acid, Aminoiminomethanesulphinic Acid, Methanesulfinic acid, aminomino

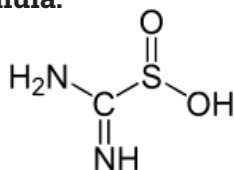
**Chemical Formula** CH<sub>4</sub>N<sub>2</sub>O<sub>2</sub>S

**CAS #:** 1758-73-2

**HS Code:** 293090

**Molecular Weight:** 108.12

**Structure Formula:**



Thiourea Dioxide is a reducing agent for use in reduction clearing, dye-stripping and general textile equipment cleaning. Thiourea Dioxide has the following features and benefits:

- Does not result in flammability problems in contact with moisture as compared to traditional hydrosulfite based reducing agents.
- Non-hazardous based on the OSHA Hazard Communication Standard.
- exhibits good storage stability.
- Is very economical in use compared to traditional hydrosulfite based reducing agents (may generally be used at 1/4 to 1/5th addition rate).
- Fully biodegradable.
- May be used in stripping, clearing and cleaning processes associated with most dye classes.

**Technical Index:**

Appearance: Free-flowing white crystal powder

Active ingredients: 99% Min

Thiourea: 0.1% Max

Moisture: 0.05% Max

Ash: 0.17% Max

Iron: 0.001% Max

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## Properties:

Thiourea Dioxide is an odorless white powder, a stable compound without oxidizability and reducibility. Solubility in water 26.7g/l at 20°C, saturated aqueous solution pH5.0. Thiourea Dioxide is very stable even in 20-30°C aqueous solution, but it decomposes gradually to form sulfinic acid under heat and alkali conditions.

## Application:

Thiourea Dioxide is mainly used in dyeing industry, pulp industry, organic synthesis in synthetic fiber industry, as well as an additive in polymerization, stabilizer for polythene, sensitizer of photographic emulsion and so on. Thiourea Dioxide has the advantages of safe handling and storage, high redox potential and efficiency.

## Storage and Handling:

Keep Thiourea Dioxide in a cool, dry and ventilated place. Avoid damp, insolation and rain. Keep away from heat, sparks, flames, alkalis or oxidizing agents.

## Packaging:

25 kg/ 80 kg net kraft paper bag/ plastic woven bag

50 kg fiber drum

500 kg jumbo bag

## Product Grades:

%48, %50, %65, %70, %80, %90, %99.

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