

Tris(2-hydroxyethyl) Isocyanurate (THEIC)

Trifunctional hydroxyl-containing intermediate for selected heat-resistant polyester and electrical-insulation resins.

CAS No. 839-90-7	EC / List No. 212-660-9	Transport Non-dangerous goods
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Product Information

THEIC is tris(2-hydroxyethyl)isocyanurate, CAS 839-90-7, an isocyanurate-ring intermediate with three hydroxyethyl groups. It provides hydroxyl functionality in selected polyester and specialty-resin development. It differs from cyanuric acid and other isocyanurate additives.

Specifications

Parameter	Specification
Appearance	White crystalline powder
Melting range	133.5–137 °C
Hydroxyl value	630–650 mg KOH/g
Acidity	≤1.1 mg KOH/g
pH	6.5–7.5
Turbidity	≤1 NTU
Water	≤0.20 %

Supply specifications follow the stated ZXCHEM TDS. Select the grade against the intended process and evaluate the complete formulation.

Typical Properties

Property	Typical Value
Molecular formula	C ₉ H ₁₅ N ₃ O ₆
Molecular weight	261.23 g/mol

Applications

Heat-resistant polyester resins: Hydroxyl-functional intermediate for selected polyester synthesis. Evaluate branching, reaction endpoint, resin viscosity and heat-ageing behaviour.

Electrical insulation varnishes: Intermediate for selected insulating resin systems. Test cure, film formation, electrical performance and thermal ageing in the final system.

Specialty polymer development: Trifunctional building block for selected polymer chemistry. Assess solubility, functional balance and finished-material properties.

Packaging / Storage

Item	Information
Packing	25 kg bags / 500 kg bulk bags
Storage	Keep sealed in a cool, dry, ventilated warehouse. Protect from moisture, heat and contamination; store away from incompatible chemicals.
Handling	Use enclosed powder feeding or local extraction. Wear suitable protective gloves, eye protection and work clothing; avoid dust inhalation and direct contact. Provide controls for fumes during hot processing.

Company Contact

Supplier	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
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