

Tris(2,3-dibromopropyl) Isocyanurate (TBC)

Brominated isocyanurate flame-retardant development in selected plastics and elastomers.

CAS No. 52434-90-9	EC / List No. 257-913-4	Transport Non-dangerous goods
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Product Information

Tris(2,3-dibromopropyl) isocyanurate is a brominated heterocyclic additive, commonly abbreviated TBC. Here TBC means CAS 52434-90-9; it does not refer to tert-butylcatechol, which is a different chemical. The isocyanurate structure carries three dibromopropyl groups.

Specifications

Parameter	Specification
Appearance	White crystalline powder
Assay	≥98.0 %
Bromine content	≥63.0 %
Melting range	105–115 °C
Volatile matter	≤0.30 %
Whiteness	≥90

Supply specifications follow the local ZXCHEM TDS. Values apply to the stated grade; complete-formulation flame performance requires testing.

Typical Properties

Property	Typical Value
Molecular formula	C ₁₂ H ₁₅ Br ₆ N ₃ O ₃
Molecular weight	728.69 g/mol

Applications

Polyolefin compounds: Brominated additive for selected polypropylene and polyethylene compounds. Evaluate stabilizer interactions, dispersion, process colour and finished-compound flame performance.

Styrenic formulations: Additive for selected styrenic polymer development. Assess compatibility, migration, ageing and retention of impact and flow properties.

Elastomer systems: Flame-retardant component for selected rubber compounds. Verify cure response, filler interactions and required mechanical and fire-test outcomes.

Packaging / Storage

Item	Information
Packing	25 kg bags with inner liners
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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