

Tetramethylthiuram Monosulfide (TMTM)

Thiuram vulcanization accelerator for selected natural and synthetic rubber cure packages.

CAS No. 97-74-5	EC / List No. 202-605-7	Transport Class 9 — Environmentally hazardous solid
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Product Information

Tetramethylthiuram monosulfide, TMTM, CAS 97-74-5, is a thiuram-family rubber accelerator. It is also known as bis(dimethylthiocarbamyl) sulfide. The monosulfide is chemically different from tetramethylthiuram disulfide, TMTD; compare the cure chemistry rather than treating them as interchangeable.

Specifications

Parameter	Specification
Appearance	Yellow powder or granules
Initial melting point	≥105 °C
Heating loss	≤0.30 %
Ash	≤0.30 %
Residue on 150 µm sieve	≤0.10 %
Residue on 63 µm sieve	≤0.50 %

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 ₆ H ₁₂ N ₂ S ₃
Molecular weight	208.37 g/mol

Applications

Natural and synthetic rubber: Thiuram accelerator for selected elastomer systems. Assess scorch safety, cure rate and final physical properties.

Combined accelerator packages: Component in selected thiazole and other combined cure systems. Evaluate sulfur balance, activator compatibility and the complete cure profile.

Moulded and extruded rubber goods: Formulation ingredient for selected rubber products. Check dispersion, cure uniformity, ageing and application-specific requirements.

Packaging / Storage

Item	Information
Packing	25 kg woven 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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