

Zinc Diethyldithiocarbamate (ZDEC)

Dithiocarbamate ultra-accelerator for selected natural rubber, synthetic rubber and latex vulcanization systems.

CAS No. 14324-55-1	EC / List No. 238-270-9	Transport Class 9 — Environmentally hazardous solid
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Product Information

Zinc diethyldithiocarbamate, ZDEC, CAS 14324-55-1, is also known as ethylziram. This zinc dithiocarbamate is selected as a fast vulcanization accelerator in rubber and latex cure packages. It differs from zinc dimethyldithiocarbamate and other dithiocarbamate salts.

Specifications

Parameter	Specification
Appearance	White powder
Initial melting point	≥172 °C
Heating loss	≤0.50 %
Zinc content	17–19 %
Residue on 150 µm sieve	≤0.10 %
Residue on 63 µm sieve	≤0.50 %
Soluble zinc	<0.01 %

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 ₁₀ H ₂₀ N ₂ S ₄ Zn
Molecular weight	361.93 g/mol

Applications

Latex vulcanization: Ultra-accelerator for selected latex systems. Evaluate dispersion, cure speed, film properties and production-relevant ageing.

Natural and synthetic rubber: Dithiocarbamate component for selected rubber compounds. Compare scorch safety, cure response and finished physical properties.

Combined accelerator packages: Secondary or primary ingredient in selected combined cure systems. Optimize the sulfur balance and assess the full formulation.

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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