



SOVEREIGN CHEMICAL COMPANY

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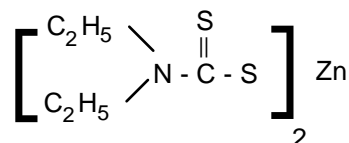
Sovchem® ZDEC

Manufacturer: Sovereign Chemical Company

Classification: Dithiocarbamate accelerator

Chemical Composition:

Chemical Structure:



Empirical Formula: C₁₀H₂₀N₂S₄Zn
 Molecular Weight: 362
 CA Nomenclature: Zinc Diethyldithiocarbamate
 Synonym Nomenclature: Zinc, bis (diethylcarbamo-dithioato-s-s')

Physical Data

Specification Properties

| | Value | | Test Method |
|---------------------------------|-----------|--------------|--------------|
| | Powder | Oiled Powder | |
| Melting Point (initial), °C | 174 min | 174 min | GB11409.1 |
| Heat Loss, % by mass | 0.30 max | 0.40 max | GB11409.4 |
| Zinc Content, % by mass | 17.0-19.0 | 17.0-19.0 | SCC-119 |
| Sieve Retention, % on 150 μ | 0.10 max | 0.10 max | GB11409.5-89 |
| Sieve Retention, % on 63 μ | 0.50 max | 0.50 max | GB11409.5-89 |
| Soluble Zinc Content, % by mass | 0.01 max | 0.01 max | Supplier |
| Additive, % | | 1.0-2.0 | |

Typical Properties

| | Value | Test Method |
|---------------|------------------------------|-------------|
| Physical Form | Powder | Visual |
| Color | Pale yellow to grayish white | Visual |

Applications

Uses: Ultra accelerator that is activated at low temperatures. Can be used as a primary and a secondary accelerator. It has a medium scorch safety for a dithiocarbamate. Vulcanizates have excellent aging properties.

Polymers: Natural rubber and most synthetic elastomers. Also used in latex. Especially good in with slow curing polymers such as EPDM and butyls.

Synergism: ZDEC is synergistic with thiazoles where it is used as a secondary accelerator.

Thiurams can be used to slightly delay the scorch of dithiocarbamates.

Cure Effect: Promotes a fast cure that is activated at low temperatures.

Crosslink Type: Dithiocarbamates promote predominately mono-sulfidic crosslinks that are good for heat aging resistance and low compression set. They promote high crosslink densities.

Packaging and Storage

Packaging: 25Kg (55.1 Lb) bag.

Shelf Life: 2 years from date of manufacture if stored as indicated below.

Storage: Store in unopened original packaging in a cool dry place.

Specification Date: June 1, 2011 (Supersedes: August 10, 2010)