



SOVEREIGN CHEMICAL COMPANY

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Oxoflex ZMTI Powder

Manufacturer: Sovereign Chemical Company

Classification: Antioxidant, Zinc 2-mercapto-toluidimidazole

Chemical Composition: Zinc salt of 4- and 5-methylmercaptobenzimidazole

Physical Data

| Specification Property | Value | Test Method |
|------------------------|-----------------|-------------------------------|
| Assay | 96.0% minimum | Supplier % by mass |
| Melting point | 280.0°C minimum | ASTM D 1519 |
| Zinc Content | 17.0 – 19.5% | Supplier % by mass |
| Heat loss | 2.0 % maximum | ASTM D 4571 @ 70°C |
| Sieve residual | 0.5% maximum | ASTM D 5461 retained 200 Mesh |

Typical Properties

| | | |
|------------------|-----------------------|------------|
| Physical Form | White to beige powder | Visual |
| Specific Gravity | 1.5 | Typical |
| Oil Content | 3.0 – 4.0 % | In Process |

Applications

Oxoflex ZMTI is an antioxidant that is specifically designed for latex and dry rubber applications that required high heat resistance. It also gives protection against high temperature discoloration and flex cracking. **ZMTI** offers protection against overcure produced with ultra-accelerators like dithiocarbamates and thiuram.

Polymers: Effective in BR, SBR, NR, IR, butyl, halobutyl, CR, NBR, plastics, polyolefins, polystyrene, ABS. Especially effective in solution type synthetic polymers. Disperses in latex systems.

Synergism: Synergistic with thioesters and phosphates and TDQ

Staining: Non-staining and non-discoloring and suitable for white and colored rubber goods.

Cure Effect: No effect on the cure system.

Packaging, Storage and Handling

Packaging: 44.09 lbs. (20 kg.) paper bags, also available in 880 lbs. supersacks

Storage: 2 years if stored in a cool dry place in the original unopened packages.

Handling: Handle only with appropriate protective equipment (gloves, dust mask and eye/face) and mechanical exhaust. Avoid dust formation. Avoid contact with skin and eyes.

Specification Date: February 15, 2007 (Supersedes: October 11, 2005)