



SOVEREIGN CHEMICAL COMPANY

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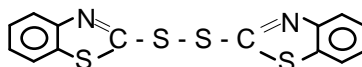
Sovchem® MBTS Oiled Powder

Manufacturer: Sovereign Chemical Company

Classification: Thiazole Accelerator

Chemical Composition:

Chemical Structure:



Empirical Formula:

C₁₄H₈S₄N₂

Molecular Weight:

332

CA Nomenclature:

Benzothiazole, 2,2'-dithiobis

Synonym Nomenclature:

Mercaptobenzothiazole disulfide

Benzothiazyl disulfide

Dibenzothiazole disulphide

Physical Data

Specification Properties

	Value	Test Method
Melting Point (initial), °C	166.0 minimum	ASTM D 1519
Melting Point (final), °C	179.0 maximum	ASTM D 1519
Assay, % by mass	95.0 minimum	ASTM D 5051
Heat Loss, % by mass	0.4 maximum	ASTM D 4571
Ash content, % by mass	0.5 maximum	ASTM D 4574
Sieve Residue, % on 100 mesh	0.10 maximum	ASTM D 5461
Sieve Residue, % on 230 mesh	0.50 maximum	ASTM D 5461
Oil Content, % by mass	1.0-2.0	In Process
Free MBT, % by mass	1.0 maximum	Typical
Typical Properties	Value	Test Method
Specific Gravity at 25°C	1.56	Typical
Appearance	Light colored powder	Visual

Applications

Uses: Fast curing primary accelerator with good scorch safety suitable for use in most polymers. Best results are obtained with a combination of MBTS as the primary accelerator and thiuram, dithiocarbamate or guanidine accelerators as boosters. MBTS can be used as a scorch modifying secondary accelerator with sulfenamides in natural rubber and synthetic elastomers. Used as a retarder and plasticizer in CR. MBTS can safely be used to produce non-discoloring and non-staining rubber products. It is particularly recommended for rubber to metal bonded products.

Polymers: Natural rubber and most synthetic elastomers.

Synergism: MBTS cure performance can be boosted with thiuram, dithiocarbamate or guanidine accelerators.

Cure Effect: Promotes a flat moderately fast cure rate. Similar in performance to MBT but provides much greater scorch safety.

Crosslink Type: MBTS promotes a balance of mono-, di- and poly-sulfidic crosslinks resulting in vulcanizates with a good balance between heat aging resistance and tear resistance.

Packaging and Storage

Packaging: 25 kg (55.1 lb) bag

Shelf Life: 2 years if stored as indicated below

Storage: Store in original unopened packages in a cool dry environment.

Specification Date: May 23, 2011 (Supersedes September 17, 2009)