



## SOVEREIGN CHEMICAL COMPANY

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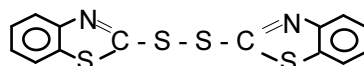
# Sovchem® MBTS Granule

**Manufacturer:** Sovereign Chemical Company

**Classification:** Thiazole Accelerator

**Chemical Composition:**

Chemical Structure:



Empirical Formula: C<sub>14</sub>H<sub>8</sub>S<sub>4</sub>N<sub>2</sub>  
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	GB11409.1
Melting Point (final), °C	179.0 maximum	GB11409.1
Assay, % by mass	95.0 minimum	Supplier
Heat Loss, % by mass	0.4 maximum	GB11409.4
Ash content, % by mass	0.5 maximum	GB11409.7-89
Free MBT, % by mass	2.0 maximum	Typical
Granule rigidity, N	1.5 maximum	GB/T11408-2003
<b>Typical Properties</b>		
Specific Gravity, at 25°C	1.56	Typical
Appearance	Cream to light yellow granule	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. net bag.

**Shelf Life:** 2 years if stored as indicated below.

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

Specification Date: June 11, 2015 (Supersedes: March 22, 2011)