



## SOVEREIGN CHEMICAL COMPANY

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# Sovchem® MBT Oiled Powder

**Manufacturer:**

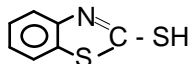
**Sovereign Chemical Company**

**Classification:**

Thiazole Accelerator

**Chemical Composition:**

Chemical Structure:



Empirical Formula:

C<sub>7</sub>H<sub>5</sub>NS<sub>2</sub>

Molecular Weight:

167

CA Nomenclature:

2-Mercaptobenzothiazole

Synonym Nomenclature:

2-Benzothiazolethione

2-benzothiazolethiol

Benzothiazole-2-thione

### Physical Data

#### Specification Properties

	Value	Test Method
Assay, % by mass	95.0 minimum	Supplier
Melting Point (initial), °C	171.0 minimum	GB11409.1
Melting Point (final), °C	182.0 maximum	GB11409.1
Heat Loss, % by mass	0.5 maximum	GB11409.4
Ash content, % by mass	0.4 maximum	GB11409.7-89
Sieve Retention, % @ 100 mesh	0.10 maximum	GB11409.5-89
Sieve Retention, % @ 230 mesh	0.50 maximum	GB11409.5-89
Oil Content, %	1 - 2	In Process

#### Typical Properties

Appearance	Cream colored oil treated powder	Visual
Specific Gravity at 25°C	1.51	Typical

### Applications

**Uses:** Fast curing primary accelerator suitable for use in most polymers. MBT acts as a retarder in CR based compounds. Acts as a mild peptizer for NR and CR rubbers. Applications include motor cycle/scooter tires, butyl tubes, belts, retreads, footwear, hot air cured products, hoses, cables and miscellaneous molded and extruded rubber products.

**Polymers:** Natural rubber and most synthetic elastomers.

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

**Cure Effect:** Promotes a flat fast cure rate. Moderately low activation temperature - very active above 115°C.

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

**Color:** MBT itself does not discolor white compounds, however, a slight yellowing effect is observed when white colored products are exposed to sunlight.

### FDA Regulations:

Adhesive component, indirect food additive 21 CFR 175.105(c)(5)

Food contact surface component 21 CFR 177.2600(c)(4), not to exceed 1.5% by weight of rubber product.

Ophthalmic and topical dosage form animal drug 21 CFR 524.1376

Slimicides, paper packaging material 21 CFR 176.300(c)

### Packaging and Storage

**Packaging:** 25 kg (55.1) lb. Net, paper bags.

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

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

Specification Date: April 14, 2011 (Supersedes: September 23,2004)