

**SOVEREIGN CHEMICAL COMPANY**

1225 West Market St., Akron OH 44313

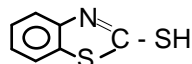
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www.sovchem.net

Sovchem® MBT Granule

Manufacturer: Sovereign Chemical Company**Classification:** Thiazole Accelerator**Chemical Composition:**

Chemical Structure:



Empirical Formula: C₇H₅NS₂
Molecular Weight: 167
CA Nomenclature: 2-Mercaptobenzothiazole
Synonym Nomenclature: 2-Benzothiazolethione
2-benzothiazolethiol
Benzothiazole-2-thione

Physical Data

Specification Properties	Value	Test Method
Melting Point (initial), °C	171.0 minimum	ASTM D 1519
Melting Point (final), °C	182.0 maximum	ASTM D 1519
Assay, % by mass	95.0% minimum	ASTM D 1991
Heat Loss, % by mass	0.5% maximum	ASTM D 4571
Ash content, % by mass	0.4% maximum	ASTM D 4574

Typical Properties

Appearance	Cream colored granules	Visual
Specific Gravity	1.51	Typical at 25°C

Applications

Uses: Fast curing primary accelerator suitable for use in most polymers. Best results are obtained with a combination of MBT as the primary accelerator and thiuram, dithiocarbamate or guanidine accelerators as boosters. **MBT** acts as a retarder in CR based compounds. **MBT** 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. **MBT** is a 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.

Last Update: July 7, 2011 (supersedes: September 23, 2004)