

Sovchem[®] MBS Granule

Manufacturer:	Sovereign Chemical Company
Classification:	Sulfenamide Accelerator
CA Nomenclature:	2-(4-Morpholinyl) mercaptobenzothiazole
Chemical Synonyms:	Morpholine, 4-(2-benzothiazolythio). N-oxydiethylene-2-benzothiazylsulfenamide (2-Morpholinothio) benzothiazole

Specification Properties	Value	Test Method
Ash Content, %	0.3 maximum	ASTM D4574
Assay, %	95 minimum	ASTM D4936
Heat Loss, %	0.5 maximum	ASTM D4571
Melting Point (Final), °C	90 maximum	ASTM D1519
Melting Point (Initial), °C	78 minimum	ASTM D1519
Methanol Insolubles, %	0.5 maximum	ASTM D4934
Typical Properties	Value	Test Method
Physical Form	Light cream to tan pellets	Visual
Specific Gravity	1.36	Typical

> APPLICATIONS

Uses: MBS has the longest scorch delay of the delayed action thiazole and sulfenamide accelerators making it ideal for calendared compounds such as steel belt and textile skim compounds. It is particularly suited for brass coated steel belt adhesion skim compounds. MBS is excellent in compounds that are highly loaded with fine particle size carbon blacks and are difficult to process. Also used in conveyor power transmission belts, rubber goods with thick cross sections, intricately shaped rubber goods, rubber footwear, injection molded goods, cables and other miscellaneous molded and extruded rubber products.

Polymers: Natural rubber and most synthetic elastomers.

Synergism: MBS cure performance can be boosted with thiuram or guanidine accelerators.

Cure Effect: MBS is a fast-delayed action accelerator. MBS provides the longest scorch delay of the thiazole and sulfenamide accelerators. It is very active above 140°C.

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

Staining: MBS at high concentrations, MBS will give slight discoloration in light colored or white rubber articles on exposure to sunlight. It is non-staining.



>FDA REGULATIONS

Food contact surface component 21 CFR 177.2600(c) (4), 1.5% maximum weight of rubber article.

> PACKAGING AND STORAGE

Packaging: 25 kg (55.1 lb.) bags.

Shelf Life: 1 year from date of manufacture if stored as indicated below.

Storage: Store in original unopened packages in a cool dry environment. All sulfenamide accelerators should be stored below 30°C in a dry place avoiding exposure to acidic atmosphere/fumes/contamination with any other material to prevent premature degradation.

Specification Date: September 23, 2004 (Supersedes October 11, 2002)