

Sovchem[®] TMQ Pastilles

Manufacturer:	Sovereign Chemical Company
Classification:	Antioxidant, dihydroquinoline type
CA Nomenclature:	Quinoline, 1, 2-dihydro-2, 2, 4-trimethyl, homopolymer
Chemical Synonyms:	Poly-(1, 2-dihydro-2, 2, 4-trimethyl-quinoline), 2,2,4-trimethyl-1,2-dihydroquinoline, polymer Trimethyl-dihydroquinoline polymer

Specification Properties	Value	Test Method
Ash Content, %	0.25 maximum	GB/T 8826-2019:5.5 / ASTM D4574
Dimer + Trimer Content, %	40 minimum	GB/T 8826-2019:5.7
Ethanol Insolubles, %	0.20 maximum	GB/T 8826-2019:5.6
Heat Loss @ 60°C, %	0.15 maximum	GB/T 8826-2019:5.4 / ASTM D4571
Isopropyl bis aniline, %	0.50 maximum	GB/T 8826-2019:5.7
Softening Point R&B, °C	80-100	GB/T 8826-2019:5.3 / ASTM E-28
Typical Properties	Value	Test Method
Physical Form	Amber to light brown pastilles	Visual
Specific Gravity	1.10	Typical

> APPLICATIONS

Uses: Carpet backing, tires, hoses, seals, retreads, shoes, mechanical goods, wire coat compounds.

Protection: Sovchem[®] TMQ is a moderate antioxidant that is very long lasting. When used in high amount (above 5 phr) it is a mild antiozonant. Sovchem[®] TMQ also protects against metal degradation (copper and manganese) and heat degradation. Sovchem[®] TMQ is a very good antioxidant, heat age resistor and flex cracking resistor especially in rubber articles subjected to severe high temperature conditions. Used with NR, IR, SBR, BR, NBR, EPDM.

Synergism: Sovchem[®] TMQ is synergistic with p-phenylene diamine type antidegradants.

Staining: Sovchem[®] TMQ gives a light yellowish stain in light colored compounds. It has very little migration stain at 1.0 phr or less.

Cure Effect: Sovchem[®] TMQ affects the cure systems in NR, IR, SBR, BR, and EPDM. It has an activating effect and poor scorch safety in CR and NBR polymers. It reduces the bin storage of CR.

Recommended Dosage: Light colored compounds: 0.25 phr or less

Dark colored compounds: 0.5 to 3.0 phr

As a stabilizer for latex foams: 0.4 to 0.8 phr 100 parts dry rubber

> FDA REGULATIONS

Prohibited for use in food 21 CFR 189.220

> PACKAGING AND STORAGE

Packaging: 25 kg (55.1 lb.) bags.

Shelf Life: 2 years from date of manufacture if stored as indicated below.

Storage: Store in a cool, dry place, away from direct sunlight. Double stacking of palletized material and/or exceeding 35°C can result in unusual compaction of product.

Specification Date: February 23, 2026 (Supersedes January 11, 2019)