



SOVEREIGN CHEMICAL COMPANY

1225 West Market Street, Akron, Ohio 44313

Phone: 330-869-0500, Fax: 330-869-0518

www.sovchem.net

Sovchem TMQ Prills

Manufacturer:

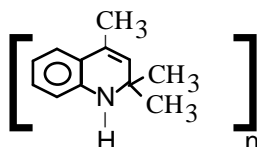
Sovereign Chemical Company

Classification:

Antioxidant, dihydroquinoline type

Chemical Composition:

Chemical Structure:



Empirical Formula:

$(C_{12}H_{15}N)_n$

CA Nomenclature:

Quinoline, 1, 2-dihydro-2, 2, 4-trimethyl, homopolymer

Synonym Nomenclature:

Poly-(1, 2-dihydro-2, 2, 4-trimethyl-quinoline)

2,2,4-trimethyl-1,2-dihydroquinoline, polymer

Trimethyl-dihydroquinoline, polymer

Polymerized 2,2-4-trimethyl-1,2-dihydroquinoline

Physical Data

Specification Properties

Specification Properties	Value	Test Method
Softening Point	83.0°C minimum	Ring & Ball
Heat Loss	0.15% maximum	ASTM D 4571 60°C @ 2 hour
Ash Content	0.25% maximum	ASTM D 4574

Typical Properties

Specific Gravity	1.10	Typical
Physical Form	Amber to light brown prills	Typical

Applications

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. Gives moderate flex cracking resistance. Sovchem TMQ is a very good antioxidant, heat age resistor and flex cracking resistor especially in rubber articles subjected to severe high temperature conditions.

Polymers: 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.

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

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

FDA Regulations

Prohibited for use in food 21 CFR 189.220

Packaging, Storage and Handling

Packaging: 25 kg (55.1 lbs.) reinforced kraft paper bags with PE liner.

Shelf Life: 2 years if stored as indicated below.

Storage: Store in a dry place, away from sunlight at up to 35°C.

Specification Date: January 18, 2006 (supersedes: November 07, 2005)