

TMQ Granulated

Chemical Name: Polymerized 2,2,4 – trimethyl – 1,2 – dihydroquinoline

Synonyms: 1,2-Dihydro-2,2,4-trimethylquinoline oligomers, Acetonanil, Acetonanyl, Acetone Anil, DHMQ, Hydro-2,2,4-trimethylquinoline oligomers, Poly(1,2-dihydro-2,2,4-trimethylquinoline), Polymerized 1,2-Dihydro-2,2,4-trimethylquinoline, TDQ, TMDQ, TMQ, Trimethyldihydroquinoline polymer.

CAS No.: 26780-96-1

H.S. Code: 3812.30.2000

Main applications:

- Slightly staining non-blooming antioxidant in the production of rubber compounds for tyres, tyres retreads and heavily stressed technical rubber goods (tubes, buffers, insulating electric wires & cables, conveyor and transmission belts, steam hoses, break linings, oil seals, profiles, boots and footwear soles and heels) based on NR, IR, SBR, NBR and polybutadiene. 0.5 - 3.0 phr loadings enhance their flex life and provide long-time thermal-oxidative protection.
- Excellent antiozonant for CR, partially replaces para-phenylenediamine (PPDA) antiozonants.
- Inhibitor of oxidation catalyzed by copper and manganese.

Other applications:

- Peroxide cure (0.25 - 1.0 phr) of EPR/EPDM and NBR compounds.
- Antioxidant protection of latexes.

Quality Data:

Parameters	Garanteed value	Test method
Appearance	Brownish granules, free from agglomerates	Visual
Assay, %, MIN.	90	Potentiometric titration of the basic nitrogen, TM743
Softening point, °C:	83 - 95	Ring & Ball, ASTM E28-67
Isopropyl bis-aniline content %, MAX	0,5	HPLC, QA5026-01
Volatiles content, %, MAX	0,4	2hrs @ 105 °C, ISO787-281
Ash content, %, MAX	0,25	2hrs @ 750 °C, ASTM D4574

Guaranteed storage life: 12 months from the date of manufacturing

Packing: 25 kg multi-wall paper bags stacked on pallets (900 kgs net/pallet) and wrapped in a shrink film.

Transportation information:

- **UN number:** 3077
- **UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
- **UN Class:** 9
- **UN Packing Group:** III
- **Environmental Hazards:** Self-classification (in accordance with GHS/CLP classification criteria):
 - Hazards to the aquatic environment: Chronic Category 2
 - H411: Toxic to aquatic life with long lasting effects.

- **Special precautions for user:** A number of restrictions may apply to materials subject to local/ national/regional classifications requirements. Please refer to the appropriate regulation for specific details regarding classification requirements and restrictions

Labelling:

- N Symbol
- R/S phrases: R52/53, S6