

**SIN RUBTECH® POLYMER BOUND
PREDISPERSED TMPTMA – 50G****(Peroxide Co – Agent)****Product Description**

Composition: A proprietary predispersed 50% Trimethylolpropane Trimethacrylate in a 50% elastomeric / processing aids binder specially formulated for use in EPDM, NR, SBR, BR formulations

Appearance: Translucent Clear to Nicotine Granules.

Density: Approx. 1.13 g/cm³.

ML 1+4 @ 50°C < 70

Moisture Content: < 1.0 %

Boiling Point:
(of active TMPTMA) Approx. 185 8C

Solubility: Virtually insoluble in water.

Storage Stability: Approximately 6 months under normal storage conditions.

Packing: 18 kg nett in sealed PE bag in a carton box.

Recommendations and Applications

TMPTMA – 50G is recommended where high productivity, better eco-environmental conditions and dispersion are required. This often translates to lower bottom-line costing.

The active TMPTMA is a very low viscosity liquid. Since TMPTMA can prematurely react with peroxides, acids, bases and metallic oxides, weighing ups have to be in separate bags. Our TMPTMA – 50G offers obvious advantages in ease of handling.

TMPTMA is one of the many polymerisable multifunctional monomers known as coagents, which are often added to peroxide cured formulations to alter the curing and vulcanisate properties. Coagents usually enhance crosslink density, modulus, shore A and this reflected in higher rheometer MH – ML, whilst elongation at break and compression set are reduced. Mooney viscosity is reduced by the addition of coagents (as it acts as a plasticiser). Most coagents like TMPTMA also reduces scorch time. To counter this, a free radical scavenger can be added eg. antioxidant, but MH – ML will also be reduced and more peroxide may have to be added to compensate for this. There are now available peroxides and coagents with scorch retarders already incorporated.

Peroxides and coagents are recommended for all rubbers except IIR, XIIR, IM, CO, PP & PVC.

Dosage

This depends on the end objectives. For example TMPTMA can itself homopolymerises, it can form a grafted chain on the polymer backbone, furthermore TMPTMA can initiate polymerisation of ethylenic unsaturation in unsaturated polymers such as BR. In short, TMPTMA can itself increase the crosslink density, modulus & hardness of unsaturated rubbers.

SIN RUBTECH CONSULTANCY SDN BHD (Company No : 103451-P)

Contact Address : 10-12, Jalan Industri Cherok To’Kun 2, Taman Industri Cherok To’Kun, 14000 Bukit Mertajam, Malaysia.

Telephone : (604) 5511804

Fax : (604) 5514804

E-Mail : marketing@sinrubtech.com