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**RUBBER CHEMICALS**  
**-PEROXIDES-**

**AKROCHEM<sup>®</sup> TMC-40**

**PRODUCT DESCRIPTION:**

Akrochem TMC-40 is a free-flowing powder dispersion of a liquid peroxide, 1,1-Bis (t-Butylperoxy) 3,3,5-trimethylcyclohexane and is used as a cross-linking agent for synthetic and natural rubbers. This peroxide is noted for its high reactivity at lower processing and curing temperatures (see half-life times below). This allows faster cures at higher temperatures (165°C) or normal cures at lower temperatures (145°C).

**TYPICAL PROPERTIES:**

Appearance.....	white powder
Peroxide Content.....	40%
Specific Gravity .....	1.41
Carrier .....	calcium carbonate
Critical Temperature (SADT) .....	60°C
Recommended Storage Temperature .....	below 30°C

**APPLICATIONS:**

Akrochem TMC-40 peroxide is used as a catalyst for cross-linking any synthetic or natural rubber that can be cured with peroxides. The powdered form provides ease of handling and weighing accuracy. TMC peroxide is a low odor catalyst and due to its aliphatic structure, imparts a minimal amount of discoloration in the final cure.

<u>Half-life times</u>	<u>TMC</u>	<u>Dicumyl</u>	<u>Bis-peroxide*</u>
10 Hours	96°C	116°C	124°C
1 Hour	115°C	134°C	142°C
1 Minute	147°C	172°C	183°C
Approx. Equivalent State-of-Cure (in phr)	1.75	1.60	1.00

\*  $\alpha, \alpha'$  bis-(t-butyl peroxy) diisopropyl benzene

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