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RUBBER CHEMICALS -PEROXIDES-

AKROCHEM® DCP

PRODUCT DESCRIPTION:

Akrochem DCP is an organic dialkyl peroxide chemically identified as dicumyl peroxide. It finds use as a cross-linking agent for many rubber elastomers and plastic materials, such as polyethylene and ethylene vinyl acetate. DCP is noted for its non-blooming characteristic and high reactivity at medium processing and curing temperatures (see half-life times below). SADT (self accelerating decomposition temperature) is 75°C and the safe processing temperature ($t_{s2}>20$ mins.) is 130°C. Store this peroxide as close to room temperature as possible.

TYPICAL PROPERTIES:

Grades:	DCP	DC-40C	DC-40K	DC-40S
Form	granule	powder	powder	paste
Peroxide Content, %	99	40	40	40
Specific Gravity (calc.)	1.10	1.53	1.53	1.05
Carrier Type	-----	calcium carbonate	kaolin	silicone

APPLICATIONS:

Akrochem DCP peroxide is used as a catalyst for cross-linking many polymers. Due to DCP's half life, this peroxide provides a good compromise between scorch safety and cure rate. In addition, this cross-linker is listed in FDA CFR 21: Title "Food and Drugs" part 177.2600, Rubber Articles Intended for Repeated Use. The powder or granular forms provide ease of handling and weighing accuracy. In silicone rubber, only vinyl-containing silicones can be cured.

Half-life times	Akrochem TMC*	Akrochem DCP	Akrochem VCP**
10 Hours (°C)	96	116	124
1 Hour (°C)	115	134	142
1 Minute (°C)	147	172	183
Recommended Cure Temp.(°C)	135-200	160-205	170-210
Approx. Equivalent State-of-Cure (phr)	1.20	1.00	0.62

* 1,1-bis(t-butylperoxy) 3,3,5-trimethylcyclohexane,

** α, α' bis-(t-butyl peroxy) diisopropyl benzene

Note: This peroxide is also available in a 40% cylindrical pellet & 60% diced pellet. For more information see Akroform® DC-40/EPR/P or Akroform® DC-60/EPR/P under dispersions.

TLM-7/24/2018, T-DCP, 40C, 40K & DC-40S (3533, 3535, 3536, 3532)

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