



255 Fountain Street Akron, Ohio 44304-1991  
 330-535-2100 ♦ 800-321-2260 ♦ Fax 330-535-8947

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

**AKROCHEM® VCP**

**PRODUCT DESCRIPTION:**

Akrochem VCP is an organic dialkyl peroxide chemically identified as t-butylperoxy-diisopropyl benzene and is used as a cross-linking agent for synthetic and natural elastomers and polyolefins such as polyethylene and ethylene vinyl acetate. This peroxide is noted for its low odor and high reactivity at medium-high processing and curing temperatures (see half-life times below). SADT (self accelerating decomposition temperature) is 80°C and the safe processing temperature (t<sub>s2</sub>>20 mins.) is 135°C. Store this peroxides as close to room temperature as possible.

**TYPICAL PROPERTIES:**

<i>Grade:</i>	<i>VCP</i>	<i>VC-40C</i>	<i>VC-40K</i>
Form	flake	powder	powder
Peroxide Content	96	40	40
Specific Gravity (calc.)	1.03	1.62	1.62
Filler/Binder Type	---	Calcium carbonate	Burgess KE kaolin

**APPLICATIONS:**

Akrochem VCP peroxide is used as a catalyst for cross-linking any synthetic or natural elastomer or polyolefin that can be cured with peroxides. The advantages of VCP peroxide over TMC (1,1 bis(t-butylperoxy) 3,3,5-trimethylcyclohexane) and DCP (dicumyl peroxide) are: higher cross-linking efficiency, low odor and longer scorch times. The powdered or granular forms provide ease of handling and weighing accuracy.

<u>Half-life times</u>	<u>Akrochem TMC</u>	<u>Akrochem DCP</u>	<u>Akrochem VCP</u>
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)	2.00	1.60	1.00

**Note:** This peroxide is also available in a 40% active masterbatch form, either in slabs (Akroperse®) or pellets (Akroform®). For more information see Akroform VC-40/EPR/P in the Peroxide Section.

jh 0204, t-vcv

Included with its product literature and upon the request of its customers, Akrochem provides product specifications and evaluations, suggested formulations and recommendations and other technical assistance, both orally and in writing (collectively the "Technical Information"). Although Akrochem believes all Technical Information to be true and correct, it makes no warranty, either express or implied, as to the accuracy, completeness, or fitness of the Technical Information for any intended use, or the results which may be obtained by any person using the Technical Information. Akrochem will not be liable for any cost, loss or damage, in tort, contract or otherwise, arising from customer's use of Akrochem products or Technical Information. It is the customer's sole responsibility to test the products and any Technical Information provided to determine whether they are suitable for the customer's needs. Before working with any product, the

customer must read and become familiar with available information concerning its hazards, proper use, storage and handling, including all health, safety, and hygiene precautions recommended by the manufacturer. Nothing in the Technical Information is intended to be a recommendation to use any product, method, or process in violation of any intellectual property rights governing such product, method, or process. No license is implied or granted by Akrochem as to any such product, method, or process. AKROCHEM CORPORATION DISCLAIMS ANY AND ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE, RELATED TO ANY PRODUCTS OR TECHNICAL INFORMATION PROVIDED BY AKROCHEM.