

Luperox[®] KC70 Red

Introduction

This product is being offered to fabricators for use in applications where a low exotherm is desired such as FRP laminates or for use in resin transfer molding (RTM).

Luperox[®] KC70 Red is a room temperature stable liquid organic peroxide blend of methyl ethyl ketone peroxide (MEKP) and cumene hydroperoxide (CHP). Properties are shown in the box on the right.

Properties of Luperox[®] KC70 Red

Property	Luperox [®] KC70 Red
Active Oxygen	8.87% min
Form	Liquid
Flash Point (SETA)	>183°F/83°C
Storage Temperature Maximum Recommended	100°F/38°C = 86°F/30°C

Dramatically reduces peak exotherm in thick laminates

Luperox[®] KC70 Red provides higher productivity in curing fiberglass reinforced unsaturated polyester systems where a lower peak exotherm temperature during cure will allow fabrication of thicker laminates without warping or cracking. During RTM, an organic peroxide with less peak exotherm temperature while curing the unsaturated polyester will eliminate or reduce shrinkage and cracking problems.

Proof by example

The cure properties listed below show the reduction in peak exotherm temperature that is possible with Luperox[®] KC70 compared to regular MEKP (Luperox[®] DDM-9) in a typical resin system.

25°C SPI Cure Activity Test of Stypol 040-5739* with 1.0 phr of catalyst

Luperox [®]	Gel Time (min)	Cure Time (min)	Peak Temp (°F)	934 Barcol Hardness**
DDM-9	16.4	29.6	251.4	2-15
KC70 Red	22.1	56.3	174.0	8-12

*Stypol is a trademark of Cook Composites and Polymers Co.

Stypol 040-5739 is a commercial marble resin.

** Hardness was determined after 24 hours for 30 grams of resin cast on a quart can lid.

CAUTION: The chemical, physical, and toxicological properties of these chemicals may not have been fully investigated. You must use due caution in handling of any such material and follow appropriate, good industrial hygiene and safety precautions to prevent human exposure. Carefully read and understand the information on the Material Safety Data Sheet (MSDS) before beginning work with the materials described in this brochure.

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, ARKEMA expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

See MSDS for Health & Safety Considerations

©2005 March Chen/Myers Arkema Inc. All rights reserved.

dianne.west@arkemagroup.com

215-419-7748

Arkema Inc.
2000 Market Street, Philadelphia, PA 19103-3222
1-800-558-5575
www.luperox.com

