

Disappearing Red Methyl Ethyl Ketone Peroxides Product Bulletin

PRODUCT PROPERTIES

Arkema Inc. **Disappearing Red Methyl Ethyl Ketone Peroxides**

Properties	Luperox® DDM-9-DR	Luperox® Delta-X-9-DR	Luperox® DHD-9-DR	Luperox® DDM-30-DR
Active Oxygen, %	8.7-9.0	8.7-9.0	8.7-9.0	5.4-5.6
Form	Liquid	Liquid	Liquid	Liquid
Specific Gravity @ 25°C	1.0063	1.0022	1.0051	0.9835
Viscosity @ 25°C, cps	13.9	14.0	12.4	9.9
Flash Point (SETA), °F/°C	203/95	> 212/100	178/81	194/90
Storage Temperature Maximum	100/38	100/38	100/38	100/38
Recommended °F/°C	≤ 86/30	≤ 86/30	≤ 86/30	≤ 86/30
SADT*, °F/°C	167/75	185/85	185/85	> 185/85

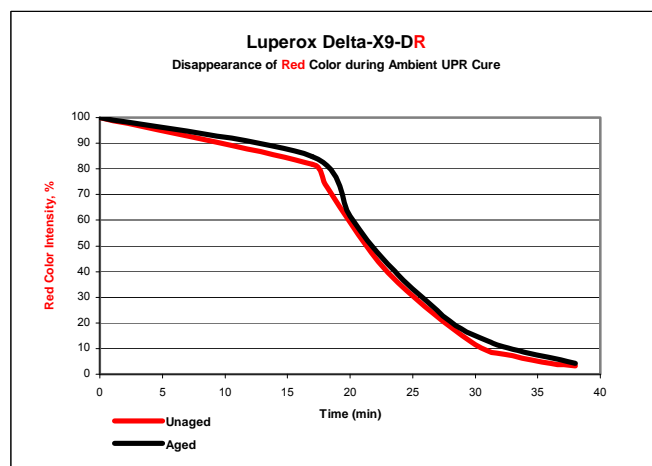
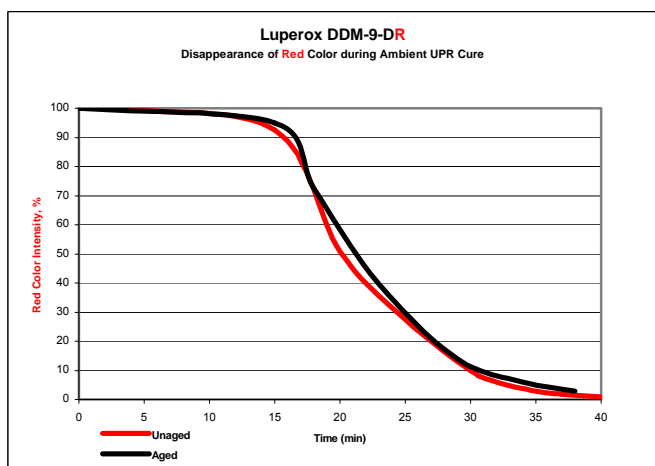
* Self-Accelerating Decomposition Temperature

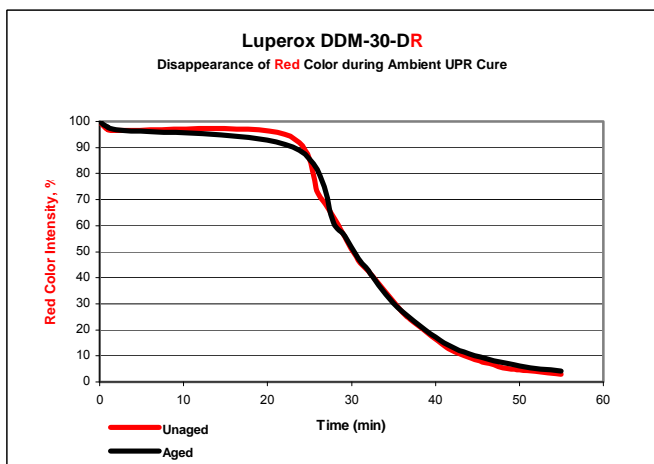
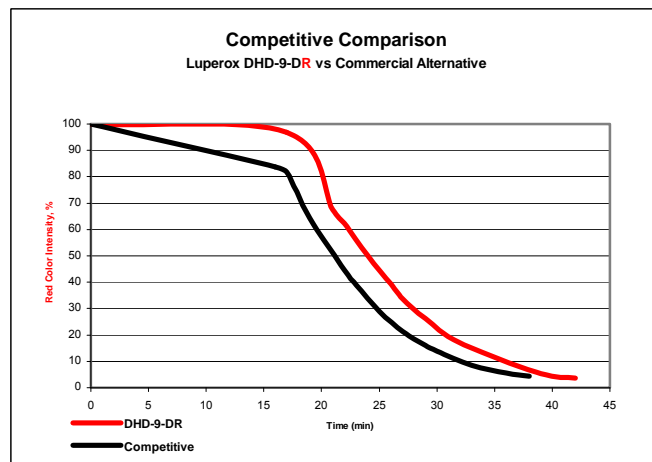
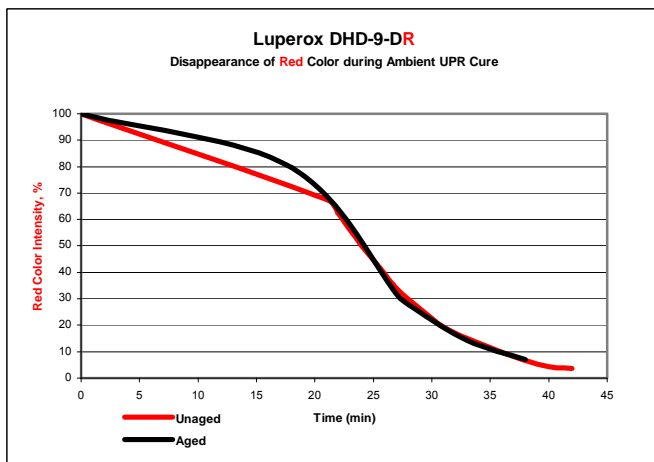
PERFORMANCE

The Arkema **red** methyl ethyl ketone peroxides (MEKPs) upon which you have relied for consistent and predictable performance are now disappearing. Not from the market, but from your final product. Arkema's new "DR" products feature a **red** color that disappears during use. As the following graphs show, the same **red** color provided by our current **red** products is introduced

during mixing and spray-up of the catalyzed resin.

During cure, the **DR** products provide the same overall performance, but the **red disappears**. As shown below, the performance of the DR material is the same, regardless of the age of the product. The graphs show how the **red disappears** when either unaged or aged catalyst is used.





DR MEKPs in a TYPICAL APPLICATION

Luperox[®] DDM-9-DR was compared with both colorless and permanent red formulations in the 75°F SPI Gel-Cure Test using promoted, commercially available, unsaturated polyester resin and 2.0 phr initiator. The results are presented in the table below and show the comparable performance of DR and permanent red formulations.

Initiator	Gel Time (min)	Gel-to-Cure Time (min)	Cure time (min)	Peak Temp (°F)	Barcol Hardness
DDM-9-DR	36.1	8.4	44.5	245	25-30
DDM-9 Red	35.9	8.9	44.8	245	20-25
DDM-9	35.0	9.3	44.3	249	20-30

accelerated laboratory testing, we have proven these products are safer in terms of gassing when compared to existing permanent red products.

SUMMARY

Arkema's DR MEKP's provide the flexibility and control that you need to work quickly, economically, and safely; while meeting your customers' expectations for your product's final color.

COMPETITIVE ADVANTAGE

DR MEKPs exhibit a clear advantage from the outset. As can be seen in the following graph, they demonstrate an intense initial color, the perfect indicator that resin is catalyzed, and a final color that will leave your customer wondering if it was ever red at all. The only color your customer will see is the color you intended.

UNCOMPRISED SAFETY

Safety is the utmost concern in handling ketone peroxides, and this is certainly true for DR products. In

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