

An Emerald Performance Materials Company**EPALLOY™ 5001****Accelerated Epoxidized Hydrogenated Bisphenol A****CAS No. 30583-72-3****DESCRIPTION**

EPALLOY 5001 is an accelerated version of the cycloaliphatic diepoxide EPALLOY 5000. Room temperature curing formulations based on EPALLOY 5001 will set up and cure in significantly shorter times than those based on EPALLOY 5000. 5001 contains no unsaturation or aromatic structures, therefore, it is expected to provide excellent resistance to outdoor weathering. Compared to formulations based on DGEBA, EPALLOY 5001 will provide improved chalking resistance and gloss retention. Curing agent selection, to achieve optimum weathering resistance, should be done with great care. Cycloaliphatic amines, not accelerated with aromatic compounds or acids, are recommended for curing.

The low viscosity of EPALLOY 5001 will allow higher filler loading than DGEBA. Reduced shrinkage and cost reductions will result. The adhesion and chemical resistance characteristics of EPALLOY 5001 based formulations are expected to be similar to DGEBA systems.

APPLICATIONS

Exterior coatings for:

- Tanks
- Concrete Dikes
- Steel Structures
- Rail Cars

TYPICAL PROPERTIES

Appearance	Clear, Clean
Viscosity @ 25°C, cps	2,000-4,500
Epoxide Equivalent Weight, g/eq	190 – 210
Gardner Color, max	3
Residual Epichlorohydrin, max ppm	25
Hydrolyzable Chloride, max %	0.3
Weight per Gallon @ 25°C, lbs.	9.5 ± 0.1
Flash Point, COC, °C (°F)	>160 (>320)

HEALTH & SAFETY PRECAUTIONS

EPALLOY 5001 is slightly irritating to the skin. As with all epoxy resins prolonged or repeated skin contact with uncured resin should be avoided. Rubber gloves and full eye protection are recommended. Protective clothing should be worn. Leather articles cannot be cleaned.

Refer to CVC Thermoset Specialties Material Safety Data Sheet on EPALLOY 5001 for additional safety & handling information. The MSDS is revised as new data becomes available.

PACKAGING & AVAILABILITY

EPALLOY 5001 is available in 55 gal. non-returnable steel drums (500 lbs. net) and 5 gal. plastic pails (45 lbs. net). Bulk shipments are available with adequate lead-time. Drum inventory is available at most CVC regional warehouses. Check with your local sales representative for the shipping location nearest you.

PERFORMANCE DATA

Comparison of Pot Life and Cure Rate of EPALLOY 5000 and 5001

<u>Formulation, pbw</u>	<u>A</u>	<u>B</u>
EPALLOY 5000	100	--
EPALLOY 5001	--	100
VERSAMINE®*671CE	39.8	46.7
 <u>Results**</u>		
A. 100 gel time at 21°C, HR	6 1/2	1 1/2
B. D Hardness after:		
24 hrs at 21°C	15	54
3 days at 21°C	75	80
7 days at 21°C	82	84
14 days at 21°C	83	84
C. Acetone resistance after (5 mil film)		
3 days at 21°C	poor	good
14 days at 21°C	fair	excellent

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**Information provided to indicate degree of acceleration only.

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