



TECHNICAL INFORMATION

EPOCAP® 43648/EPOCURE® 50110 (formerly EPOCAP® 3648A/EPOCURE® 110B) Epoxy Encapsulation System

PRODUCT DESCRIPTION

EPOCAP 43648/EPOCURE 50110 is a versatile two-component, low-viscosity, room temperature cure encapsulation system. The cured system displays excellent physical and electrical properties at ambient temperatures. The system is recommended for low voltage, low temperature applications.

HOW TO USE

To obtain the best cured properties, accurate proportioning and thorough mixing are essential. To obtain void free castings, the mixed system should be degassed under vacuum at approximately 29 inches of mercury (or better) for a few minutes, both immediately after mixing and then again after castings are poured, if the work life of the system allows.

MIXING AND CURING SCHEDULE

<u>Ratio</u>	<u>43648</u>	<u>50110</u>
By Weight	100	50
By Volume	100	60.5

The cure schedule is dependent upon the temperature. The recommended cure schedule will vary with the desired properties. The recommended schedule to achieve the typical properties is shown below:

5 to 7 days at 25 °C (77 °F) or
 18 to 24 hours at 25 °C plus 2 hours at 100 °C (212 °F)

TYPICAL UNCURED PROPERTIES

	<u>43648</u>	<u>50110</u>	<u>Mixed</u>
Color	Amber	Dark Amber	Amber
Viscosity @ 25 °C, cps	14,000	300	1,500
Weight per Gallon, lbs.	9.7	7.9	9.06
Specific Gravity @ 25 °C	1.16	0.95	1.08
Gel time, minutes			
100 gm mass @ 25 °C	---	---	125
Filler Type	None	None	None
Shelf Life (in separate sealed containers), months	12	12	---

TYPICAL CURED PROPERTIES

(Tested at 25 °C unless otherwise indicated)

<u>Test</u>	<u>Result</u>
Hardness, Shore D	80
Tensile Strength, psi	6,850
Elongation, %	2.0
Flexural Strength, psi	11,400
Flexural Modulus, psi	273,000
Impact Strength, ft-lbs.	0.49
Heat Distortion Temperature, °C	45

STORAGE AND HANDLING

These materials should be stored in a dry environment within a temperature range of 16 °C to 27 °C (60 °F to 80 °F). Extremes of temperature beyond this range may result in crystallization or polymerization of the materials. Introduction of a nitrogen blanket into the containers before closing will improve the storage life of the products.

A wide variety of cleaning solutions are available for cured and uncured epoxies and polyurethanes. For more information on proper recommendations and procedures, contact the Technical Department.

SAFETY

These materials are intended for industrial use only and the practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

Although the system contains low volatility materials, nevertheless, care should be taken in handling. Adequate ventilation of work place and ovens is essential. These materials may cause dermatitis in susceptible individuals. Keep off skin and out of eyes. In case of accidental skin contact, wash thoroughly with soap and water.

In case of eye contact, flush eyes thoroughly with water and consult a physician immediately.

Refer to Material Safety Data Sheets for additional information.

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ISO 9001:2008

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ADDITIONAL INFORMATION

Visit our web site at:

www.royaladhesives.com

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NOTE

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