



TECHNICAL INFORMATION

EPOCAP® 43649/EPOCURE® 50114 (formerly EPOCAP® 3649A/EPOCURE® 114B) Epoxy Encapsulation System

PRODUCT DESCRIPTION

EPOCAP 43649/EPOCURE 50114 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. It is the black version of EPOCAP 43648/EPOCURE 50114.

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>43649</u>	<u>50114</u>
By Weight	100	35
By Volume	100	40

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>43649</u>	<u>50114</u>	<u>Mixed</u>
Color	Black	Dark Amber	Black
Viscosity @ 25 °C, cps	12,000	800	9,000
Weight per Gallon, lbs.	9.7	8.2	9.26
Specific Gravity @ 25 °C	1.16	0.98	1.11
Work life, minutes			
100 gm mass @ 25 °C	---	---	30
Gel time, minutes			
100 gm mass @ 25 °C	---	---	35
Peak Exotherm, °C			
100 gm mass @ 25 °C	---	---	177
Filler Type	None	None	None

Shelf Life (in separate sealed containers), months	12	12	---
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TYPICAL CURED PROPERTIES

(Tested at 25 °C unless otherwise indicated)

<u>Test</u>	<u>Result</u>
Hardness, Shore D	84

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

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www.royaladhesives.com

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NOTE

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