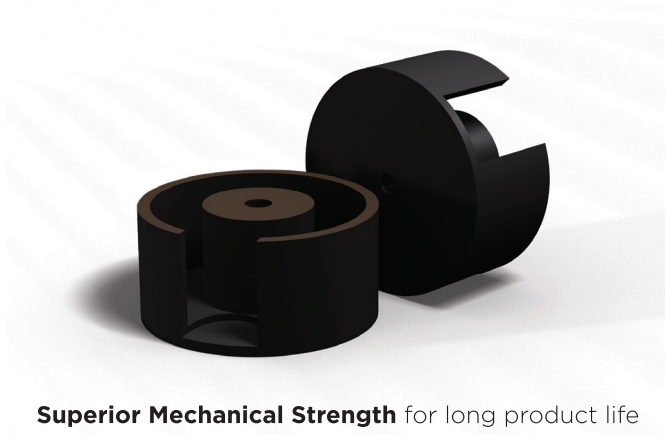


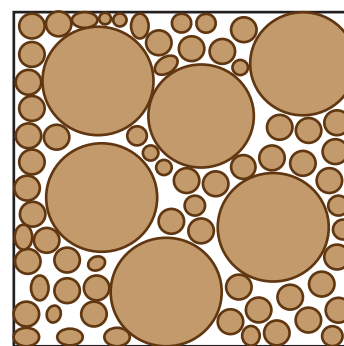
SolEpoxy™ DK14-2100 Brown



Epoxy binding resin for Class F capable Pot Cores



Superior Mechanical Strength for long product life



Optimal particle distribution provide **excellent green strength** after cold pressing



Short curing times for **maximum productivity**



Low shrinkage binding resin reduces core stress to minimize effect on **magnetic and inductance properties.**

DESCRIPTION

Used in inductors and transformers, SolEpoxy DK14-2100 was designed to be a **Class F organic resin** binder to increase strength.

DK14-2100 was formulated to **minimize core stress** by targeting low shrinkage and low moisture absorption. These features maintain **shape stability** & avoid affecting magnetic properties or inductance values.

SolEpoxy DK14-2100 has **excellent green strength, high temperature resistance and low moisture absorption.** This combination is ideal for ferrite pot cores to give mechanical integrity without affecting magnetic properties.

ADVANTAGES

- ▶ High green strength allows cold-pressed part to be easily handled before oven post-cure
- ▶ High Tg is key to Thermal Class F (155°C) rating
- ▶ Low shrinkage and moisture absorption to reduce core stress and preserve magnetic properties

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RECOMMENDED CURE CONDITIONS

Application Method,	Fluidized bed	■■■■□
	Cold pressing	■■■■■
Cure Conditions, induction cure, minutes,	0.5 - 3.0	

UNCURED PROPERTIES

Bulk Density, g/cc	0.74	
Particle Size, %, - 177 micron / 80 mesh	100	
- 44 micron / 325 mesh	26	
Halogen-free	yes	
RoHS / REACH Compliant	yes	
Shelf Life 1, from date of manufacture, months,		
@ 10 °C	12	
@ 23 °C	3	

TYPICAL CURED GENERAL PROPERTIES

Available Colors ²	Brown	
Specific Gravity, g/cc	1.75	
Glass Plate Flow, mm,	@ 150 °C	22
Hot Plate Gel Time, seconds,	@ 160 °C	18
	@ 210 °C	5
Moisture Absorption ³ , weight %, @ 24 hours	0.30	
Cut Through ⁴ , °C,	380	
Edge Coverage ⁵ , %	34.2	

TYPICAL CURED MECHANICAL PROPERTIES

Closed Anvil Impact ⁶ ,	inch/lbs	> 160
	joules	> 8.79

TYPICAL CURED THERMAL PROPERTIES

Glass Transition Temperature (Tg), ⁷ °C	155	
Coefficient of Thermal Expansion (CTE), ppm/°C,		
Alpha 1	39.4	
Alpha 2	123	

TYPICAL CURED ELECTRICAL PROPERTIES

Dielectric Strength,	volts/mil	1010
	kV/mm	39
Dielectric Constant ⁸ 100 Hz,	@ 25 °C	5.38
	@ 100 °C	5.27
Dissipation Factor, 100 Hz,	@ 25 °C	0.0173
	@ 100 °C	0.0150

STORAGE & HANDLING

Powder should be stored at 10°C or below, in closed containers. After removal from cold storage, the material must be allowed to come to room temperature in the sealed container to avoid moisture contamination. Suggested waiting time is 24 hours. Please consult our Product Handling Recommendations for Coating Powders. For safe handling information on this product, consult the Material Safety Data Sheet (SDS).

DATA RANGES

The data contained herein may be reported as a typical value and/or range values based on actual test data and are verified on a periodic basis.

² custom colors may be possible to formulate

³ 18 mil for 24 hours @ 23°C

⁴ 2 lbs weight, 26 gauge wire

⁵ dipped, cured @ 210 °C, -17 mils / 0.43 mm ⁶ cured 10 minutes @ 210°C

⁶ cured 10 minutes @ 210°C

⁷ cured 60 minutes @ 150 °C

⁸ 20 mil / 0.51 mm thickness

■■■■■ excellent
 ■■■■ good
 ■■■ fair
 ■□□ poor

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