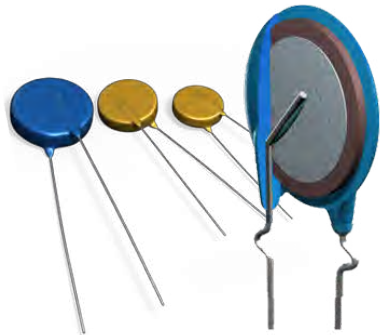


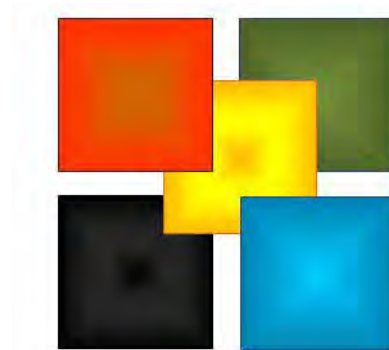
SolEpoxy™ DK18-05



Class 2 & 3 capable epoxy coating powder for ceramic capacitors/varistors and tantalum capacitors



DESIGNED FOR CLASS 2 CERAMIC CAPACITORS AND VARISTORS



AVAILABLE IN A WIDE RANGE OF COLORS



GREAT FOR TANTALUM CAPACITORS. PICKS UP AND CURES AS LOW AS 110°C



UL-LISTED WITH A V-0 FLAMMABILITY AND RTI RATING OF 105°C

DESCRIPTION

SolEpoxy™ DK18-05 is a medium-performance, epoxy coating powder developed for **Class 2 & 3 capacitors and varistors**.

DK18-05 has **excellent pickup and curing** at temperatures **as low as 110°C**, making it excellent also for **tantalum capacitors and other temperature sensitive devices**.

DK18-05 has a proven track record, is recognized with a **UL 94 V-0 flammability rating**, and is available in a wide range of colors.

ADVANTAGES

- ▶ Used for more than 20 years on capacitors, varistors, and other passive components
- ▶ UL-recognized with a UL 94 V-0 flammability rating
- ▶ Has a pickup and cure temperature as low as 110°C
- ▶ Even better pickup and cure speed at higher temperatures
- ▶ Laser markable
- ▶ Available in a range of colors, including blue and gold

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RECOMMENDED CURE CONDITIONS

Application Method ¹ ,	electrostatic fluidized bed	■■□□
	fluidized bed	■■■■
	electrostatic spray / blow coating	■□□□
Cure Conditions, minutes,	@ 110 °C	30
Preheat Temperature, °C		100 - 180

UNCURED PROPERTIES

Particle Size, %,	- 177 micron / 80 mesh	100
	- 44 micron / 325 mesh	35
Halogen-free		no
RoHS / REACH Compliant		yes
Shelf Life, from date of manufacture, months,	@ 10 °C	12

TYPICAL CURED GENERAL PROPERTIES

Available Colors ²	● Black ● Blue ● Gold	
ability to visually detect arc tracks ¹	■■■■□ ■■■□ ■■■□	
Specific Gravity, g/cc		1.64
Glass Plate Flow, mm,	@ 150 °C	32
Hot Plate Gel Time, seconds,	@ 160 °C	23
Laser Markable ¹		■■■■□
Moisture Absorption ³ , weight %, @ 24 hours		0.37

TYPICAL CURED THERMAL PROPERTIES

Glass Transition Temperature ⁴ , °C	107
Coefficient of Thermal Expansion (CTE), ppm/°C,	
Alpha 1	46.0
Alpha 2	129
UL Relative Thermal Index (RTI) Rating, UL 746B, °C	105

TYPICAL CURED ELECTRICAL PROPERTIES

Insulation Resistance,	@ 25 °C	8.4 x 10 ¹³
	@ 100 °C	7.0 x 10 ¹¹
Dielectric Strength ⁵ ,	volts/mil	1060
	kV/mm	41
Dielectric Constant, 100 Hz,	@ 25 °C	4.2
	@ 100 °C	4.3
Dielectric Constant, 10 kHz,	@ 25 °C	4.2
	@ 100 °C	4.0
Dissipation Factor, 100 Hz,	@ 25 °C	0.012
	@ 100 °C	0.038
Dissipation Factor, 10 kHz,	@ 25 °C	0.009
	@ 100 °C	0.012

¹ rating: ■□□□ poor, ■■□□ fair, ■■■□ good, ■■■■ excellent

² custom colors may be possible to formulate

³ 18 mil for 24 hours @ 23°C

⁴ cured 60 minutes @ 150°C

⁵ 20 mil / 0.51 mm thickness

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STORAGE & HANDLING

Materials 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 Epoxy Mold Compounds*.

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

DATA RANGES

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

NOTICE FOR SPECIFIERS: The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose. Consequently, we disclaim responsibility for user's specification of this or other SolEpoxy product.

Furthermore, it is user's responsibility to specify their production methods and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use of SolEpoxy products. Production methods mentioned herein are for reference purposes only.

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