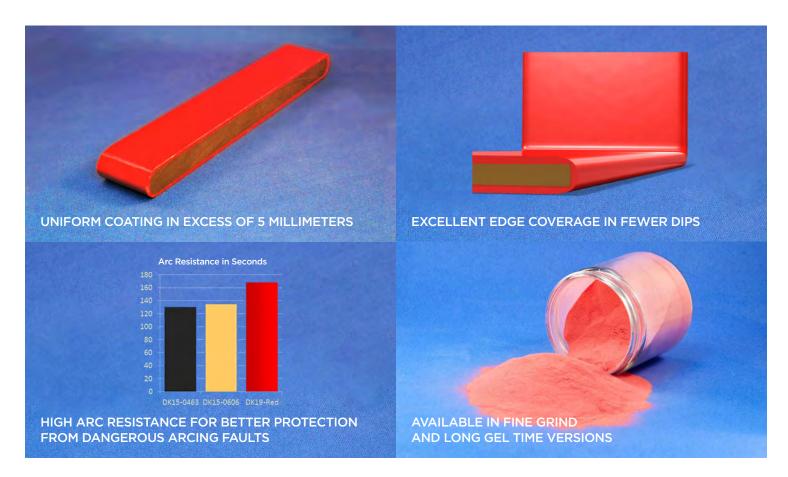
TECHNICAL DATA SHEET REV. A JANUARY 2014

## SolEpoxy<sup>™</sup> DK19



Industry standard epoxy coating powder for medium voltage (600V - 38kV) busbars and switchgear



#### DESCRIPTION

SolEpoxy™ DK19 is a high performance, epoxy-based coating powder developed for the insulation of medium voltage (up to 38 kV) busbars where good arc resistance is critical to performance.

DK19 has a **high build rate**, giving the busbar both **high edge coverage** and allowing the busbar to have the **thickest possible coating with the fewest number of dips** at the most critical place on the busbar.

DK19 has a particle size distribution which is tailored for application via a fluid bed process.

#### **ADVANTAGES**

- Industry standard for medium voltage busbars
- Best-in-class arc resistance
- Suitable for copper and aluminum bar
- ▶ Higher powder thickness build-up in fewer dips
- ▶ Build in excess of 200 mils (5 mm)
- Rapid build rates to reduce cycle times

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	RECOMMENDED CURE CONDITIONS				
	Application Method <sup>1</sup> , electro	electrostatic flui fluid estatic spray / blow	dized bed		
Cure Conditions, minutes,		utes,	@ 170 °C	20	
	Preheat Temperature,	°C		170 - 220	

UNCURED PROPERTIES			
Bulk Density, g/cc	0.85		
Particle Size, %, -177 micron / 80 mesh -44 micron / 325 mesh	100 27		
Halogen-free	yes		
RoHS / REACH Compliant	yes		
Shelf Life, from date of manufacture, months,			
@ 10 °C	9		

TYPICAL CURED GENERAL PROPERTIES			
Available Colors <sup>2</sup> ability to visually det	<b>♦</b> Red		
Specific Gravity, g/cc		1.81	
Glass Plate Flow, mm,	@ 150 °C	21	
Hot Plate Gel Time, seconds,	@ 160 °C	50	
Build Rate, mil/sec,	@ 180 °C @ 210 °C	7.1 8.7	
Edge Coverage <sup>3</sup> ,	%	45.0	

### TYPICAL CURED MECHANICAL PROPERTIES

Closed Anvil Impact <sup>4</sup>, inch/lbs 140 joules 7.69

#### TYPICAL CURED THERMAL PROPERTIES

UL Relative Thermal Index (RTI) Rating, UL 746B, °C 105

TYPICAL CURED ELE	CURED ELECTRICAL PROPERTIES			
Volume Resistivity, ohms-cm,	500 volts @ 25 °C	7.8 x 10 <sup>16</sup>		
Arc Resistance, seconds		168		
Insulation Resistance,	@ 25 °C	1.1 x 10 <sup>13</sup>		
	@ 100 °C	3.0 x 10 <sup>12</sup>		
Dielectric Strength <sup>5</sup> ,	volts/mil	1040		
	kV/mm	41		
Dielectric Constant, 100 Hz,	@ 25 °C	3.9		
	@ 100 °C	4.0		
Dissipation Factor, 100 Hz,	@ 25 °C	0.017		
	@ 100 °C	0.068		

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

<sup>&</sup>lt;sup>2</sup> custom colors may be possible to formulate

<sup>&</sup>lt;sup>3</sup> dipped, cured @ 210 °C, ~17 mils / 0.43 mm

<sup>&</sup>lt;sup>4</sup> cured 10 minutes @ 210°C

<sup>&</sup>lt;sup>5</sup> 20 mil / 0.51 mm thickness

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#### 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 (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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