TECHNICAL DATA SHEET REV. A JANUARY 2014

# SolEpoxy<sup>™</sup> DK15-0463 FG



Fine grind version of DK15-0463 with great humidity resistance for outdoor low voltage busbars



### DESCRIPTION

SolEpoxy™ DK15-0463 FG is an epoxy based coating powder developed for the **insulation of low voltage busbars**.

It offers improved **moisture resistance** and **dielectric strength** along with a **smooth surface appearance**. The particle size distribution is optimized for use in large fluid bed coating operations.

DK15-0463 FG has a **UL Relative Thermal Index** (RTI) rating of 130°C, making it ideal for applications requiring high thermal stability.

### **ADVANTAGES**

- Excellent bed life—so important for large busbar coating operations
- Excellent moisture resistance, even in high temperature and corrosive conditions
- Suitable for both copper and aluminum busbar coating
- Smooth surface allows closer bar spacing in busway

DK15-0463 FG is an extremely reliable coating powder, used for decades in the power distribution industry.

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RECOMMENDED CURE CONDITIONS			
Application Method <sup>1</sup> , electro	electrostatic fluid fluid static spray / blow	ized bed	
Cure Conditions, minu	utes,	230 °C	15
Preheat Temperature,	°C		170 - 220

UNCURED PROPERTIES			
0.69			
100 42			
yes			
yes			
12			

TYPICAL CURED GENERAL PROPERTIES				
Available Colors <sup>2</sup> ability to visually det	<b>♦</b> Black			
Specific Gravity, g/cc		1.52		
Glass Plate Flow, mm,	@ 150 °C	27		
Hot Plate Gel Time, seconds,	@ 210 °C	49		
Build Rate, mil/sec,	@ 180 °C @ 210 °C	5.8 8.4		
Edge Coverage <sup>3</sup> ,	%	45.0		

TYPICAL CURED MECHANICAL PROPERTIES			
Closed Anvil Impact <sup>4</sup> ,	inch/lbs joules		

TYPICAL CURED THERMAL PROPERTIES			
UL Relative Thermal Index (RTI) Rating, UL 746B, °C 106			
UL Flammability Rating, UL 94	@ 0.53 mm	HB-O	

TYPICAL CURED ELECTRICAL PROPERTIES			
Volume Resistivity, ohms-cm,	500 volts @ 25 °C	8.6 x 10 <sup>16</sup>	
Arc Resistance, seconds		130	
Insulation Resistance,	@ 25 °C	1.8 x 10 <sup>14</sup>	
	@ 100 °C	2.0 x 10 <sup>12</sup>	
Dielectric Strength <sup>5</sup> ,	volts/mil	1130	
	kV/mm	44	
Dielectric Constant, 100 Hz,	@ 25 °C	3.9	
	@ 100 °C	4.0	
Dissipation Factor, 100 Hz,	@ 25 °C	0.006	
	@ 100 °C	0.020	

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

 $<sup>^{2}</sup>$  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

 $<sup>^{\</sup>rm 5}$  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.

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