
Dolphon® XL-2109 1K Resin

Dolphon® XL-2109 is a 1K resin based on polyester with UV catalysts.

Attributes

Dolphon® XL-2109 has the following outstanding features:

- very low weight loss on cure
- very low odour
- excellent wetting and penetration properties
- very good bond strength
- fast curing cycles
- medium high viscosity
- good adhesion

Application

Dolphon® XL-2109 can be applied in roll-through and automatic machines.

Recommended cycle for roll-through application:

- Pre-heat the windings to 70-80 °C.
- Bring rapidly the windings to a temperature of 140 °C to gel the resin by Joule-effect.
- Cure 30 min. at 150-160 °C by Joule-effect.
- Complete the cure of the resin on the external part of the unit by UV-rays for 5-10 min.

These are general information. For specific conditions please get in touch with us.

Standards

UL approved class H (180 °C) - file OBOR2.E317427 and OBJS2.E317429

UL 1446	Twisted pairs	Helical Coils
MW 16-C	220 °C	
MW 28-C	130 °C	
MW 35-C	180 °C	200 °C

Delivery forms

Dolphon® XL-2109 is delivered in 25 kg disposable containers, 230 kg barrels or 1,200 kg containers.

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.
Updated 04/24

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Storage

Dolphon® XL-2109 can be stored for 6 months at room temperature (max. 25 °C).

The casting resin must be stored in a cool place and protected against direct sunlight, UV radiation and sources of heat.

Hardening

Recommended cure time:

150-160 °C - 30 min. + 30 min. UV-rays

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Mechanical	Unit of measure	Conditions	Values	Test method
Weight loss	%	15 g at 100-140°C for 20 min.	<3.5	-
Bond strength	N	155 °C	55	ASTM D-2519
Bond strength	N	80 °C	85	ASTM D-2519
Bond strength	N	25 °C	170	ASTM D-2519

Thermal	Unit of measure	Values	Test method
Thermal class		H (180 °C)	
Flashpoint	°C	>130	

Electrical	Unit of measure	Conditions	Values	Test method
Dielectric strength	kV/mm	25 °C	120	ASTM D-115
Volume resistivity	Ω x cm	50 % RH at 23 °C	1.4 x 10 ¹⁴	ASTM D-257
Surface resistivity	Ω x cm	50 % RH at 23 °C	1.2x10 ¹⁴	ASTM D-257
Spec. resistance	Ω cm	ASTM D-257		

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Liquid phase	Unit of measure	Conditions	Values	Test method
Gel time	min	at 100 °C	15-25	
Viscosity	s	25 °C	55-85	DIN Cup 6
Viscosity	s	25 °C	60-90	Ford Cup 6
Viscosity	cps	25 °C	1400-1700	Brookfield
Specific density	g/cm ³	25 °C	1.10 - 1.20	

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