ELANTAS
Electrical Insulation

Product Information

Epoxylite® TSA 220

1 Component Epoxy VPI Resin

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Epoxylite® TSA 220

Description:

Single component, clear yellow, 100% solids Epoxy VPI resin.

Product provides for a cured insulation system which conforms to thermal class 220° C.

Application:

High performance VPI resin for treatment of traction motors and field coils.

Processing:

For a complete guide to the processing of components and machines in Epoxylite® TSA 220 please refer to the separate processing data sheet for this product.

Containers of Epoxylite® TSA 220 should be stored in a cool place away from direct sunlight or other heat sources.

Maintenance of Resin:

The viscosity and gel-time of Epoxylite® TSA 220 in tanks should be regularly monitored and maintained within the recommended limits.

A Tank Sample Testing service is available from ELANTAS on request.

Properties:

Appearance	Off white / buff coloured liquid	
Viscosity	1250	mPas @ 50ºC
Specific Gravity	1.18	g / cm³
Mix Ratio	Single Component	p.b.w.
Mix Ratio	Single component	p.b.v.
Gelation Time	6 minutes	@ 165ºC
Cure Schedule	12 hours	@ 165ºC
Flash Point	> 200	ºC

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Cured Properties		
Thermal Class	(ASTM D2307 / 20000 hrs)	220º C
Shore D Hardness	(DIN 53505)	92 @ 25º C
Glass Transition Temp.	(IEC 1006)	150º C
Tensile Strength	(ISO 527)	110 N / mm²
Elongation at Break	(ISO 527)	2.5 %
Thermal Coeff of Expansion	(DIN 53752)	$50.10^{-6}K^{-1}$
Thermal Conductivity	(ISO 8894-1)	0.21 W / mK
UL Recognition		
Water Absorption	(ISO 62)	0.12 % @ 23ºC
Dielectric Strength	(IEC 243-1)	260 kV / cm
Dielectric Constant	(IEC 250)	3.6 @ 50Hz
Dissipation Factor	(IEC 250)	0.003 @ 20° C
Volume Resistivity	(IEC 93)	> 10^{13} ohm / cm
Comparative Tracking Index	(IEC 112)	> 600 Volts
Storage	Minimum storage life 12 months in tightly closed containers at temperatures below 25°C.	
Handling	Refer Material safety data sheet.	
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