

Datasheet AIEPGC308



AI EP GC 308 is particularly good electrical and mechanical properties by continuous use, even at high temperatures. Particularly good chemical resistance. Engineering and insulation material in electrical machinery, transformers, and chemical plants. Suitable for mechanical applications, e.g., as wear parts/vanes in oil-lubricated vacuum pumps. The flexural strength and modulus of elasticity values are measured along the sheet.

Application

Can be used at cryogenic temperatures. Insulation and construction material in electrical machines, transformers and chemical plants.

Material

Epoxy with woven glass cloth composite.

Availability

	Value	Unit
Sheet thickness	0,15-150	mm
Sheet size	1250x1250/2500	mm



AIEPGC308 - Specifications

Physical properties

	Test standard	Value	Unit
Density	ISO 1183-A	1,85	g/cm ³
Water absorption at 23 °C	ISO 62-1	15	mg
Flammability		on request	

Mechanical properties

	Test standard	Value	Unit
Compressive strength static	ISO 604	550	MPa
Module of elasticity - Youngs modulus	ISO 178	22000	Mpa
Tensile strength	ISO 527	320	MPa
Shear strength		on request	
Impact strength		on request	
Bending strenght	ISO 178	500	MPa
Flexural strength		on request	
Insulation resistance		on request	
Elastic modulus from bending test		on request	
Compressive strenth perpendicular		on request	
Izod impact strength, parallel with layers	ISO 180/2A	65	kJ/m ²
Shear strength parallel	ISO 60893-2	55	MPa

Thermal properties

	Test standard	Value	Unit
Thermal endurance 20,000 h (T.I)	IEC 60216	180	°C

Friction properties

	Test standard	Value	Unit
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Electrical properties

	Test standard	Value	Unit
Dielectric strength perpendic thickness 3 mm		on request	
Resistance to tracking (CTI)	IEC 60112	200	CTI
Permittivity 50Hz	IEC 60250	5	[-]
Permittivity 1MHz	IEC 60250	5	[-]
Dissipation factor 50Hz	IEC 60250	0,008	[-]
Dissipation factor 1 MHz	IEC 60250	0,01	[-]
Insulation resistance after submersion in water	ISO 60167	500.000	MΩ