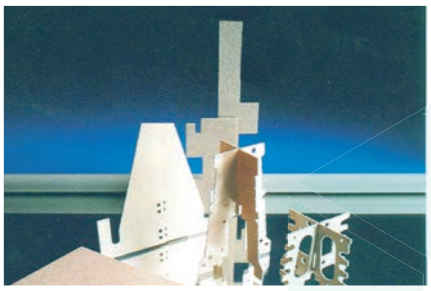
COMPOSITES

MIKLA 990

Mikla 990's low thermal conductivity allows saving energy costs substantially. As a result of low water absorption and chemical stability, there is an increase in the life expectancy of this material. It consists of glass fabric, glass fibre, glass mat and mica paper, as well as to high temperatures resistant resins. It is an asbestos-free product, resistant to high temperatures and has a good mechanical resistance even at high temperatures.



MAIN CHARACTERISTICS

- Asbestos-free
- Low thermal conductivity
- Easy machining
- Long life expectancy
- Low water absorption
- Good stability of hydro carbonates
- Good chemical stability
- Excellent mechanical durability
- Very good electrical properties

APPLICATIONS

- Insulation for presses
- Thermal insulation parts
- Insulation of pressure casting machines
- Glass industry
- Cast rubber moulds

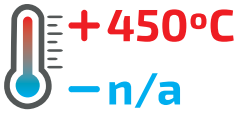
CHEMICAL RESISTANCE

ELECTRICAL INSULATION

WEAR RESISTANCE

SLIDING PROPERTIES

IMPACT RESISTANCE



TEMPERATURE RANGE

COMPOSITES

TECHNICAL DATASHEET

PROPERTIES	TEST METHODS	UNITS	MIKLA 990
DENSITY	ISO 1183	g/cm³	2.22
WATER ABSORPTION			
AFTER 24H IMMERSION IN WATER OF 23ºC	ISO 62	mg	-
		%	0.2
THERMALPROPERTIES			
TEMPERATURE INDEX (TI)	IEC 60216	ºC	-
THERMAL CONDUCTIVITY	DIN 52612	W/m.K	0.18
COEFFICIENT OF LINEAR THERMAL EXPANSION	VDE 0304	1.0E-6/K	9
MAXIMUM ALLOWABLE SERVICE TEMPERATURE			
FOR SHORT PERIODS	-	ºC	800
CONTINUOUSLY	-	ºC	450
MECHANICAL PROPERTIES AT 23ºC[8]			
FLEXURAL STRENGTH	ISO 178	MPa	180
FLEXURAL RESISTANCE AT 150ºC/1H	ISO 178	MPa	-
MODULUS OF ELASTICITY	ISO 178	MPa	-
CHARPY IMPACT RESISTANCE - NOTCHED	ISO 179	KJ/m²	-
RESISTANCE TO FLAT COMPRESSION	ISO 604	MPa	
FLAT COMPRESSIVE FORCE AT 23ºC	ISO 604	MPa	450
FLAT COMPRESSIVE FORCE AT 200ºC	ISO 604	MPa	300
TENSILE STRENGTH	ISO 527	MPa	-
CUTTING VOLTAGE	IEC 60893	MPa	-
ELECTRICAL PROPERTIES AT 23ºC			
INSULATION RESISTANCE AFTER IMMERSION IN WATER	IEC 60167	Ω	-
VOLTAGE FALL AT 90ºC IN OIL	IEC 60243-1	kV	-
FLAT ELECTRIC FORCE	IEC 60243-1	kV/mm	23
RELATIVE PERMITTIVITY AT 1MHz	IEC 60250	-	-
DISSIPATION FACTOR AT 1MHz	IEC 60250	-	-
COMPARATIVE TRACKING INDEX (CTI)	IEC 60112	V	-
TRANSVERSE DIELECTRIC RIGIDITY AT OIL	IEC 60243-1	kV/mm	20