

Technical Data Sheet

Duresco NU 510-1 F

Product Characteristics: Glass fibre reinforced epoxy moulding compound with very good mechanical properties for high temperature applications

Applications: Electro insulation material with good adhesion to metal for Commutators, Rotors, Stators etc.
Resistant against sterilization processes for Medical applications

Processing methods: Compression and transfer moulding

Shelf life: 18 months at temperatures $\leq 8^{\circ}\text{C}$
6 months at temperatures $\leq 18^{\circ}\text{C}$

The information given in this publication is based on the present state of our knowledge but any conclusions and recommendations are made without liability on our part. Buyers and users should make their own assessment of our products under their own conditions and for their own requirements.

Technical Data Sheet

Mechanical Properties:

	Standard	Unit	Value
Tensile strength	ISO 527	MPa	90
Flexural strength	ISO 178	MPa	160
Surface strain	ISO 178	%	1.1
E-modulus (flexural test)	ISO 178	MPa	18'000
Impact strength	ISO 179-1	kJ/m ²	11
Notched impact strength	ISO 179-1	kJ/m ²	4.0

General and Thermal Properties:

	Standard	Unit	Value
Density	DIN 53479	g/cm ³	2.0
Water absorption (100°C/30min)	ISO 62	%	0.05
Glass transition temperature	ISO 6721	°C	170
Temperature-time limit Tl (flexural strength)	IEC 60216	°C, 20'000h	180
Thermal conductivity	ISO 22007-4	W/mK	0.70
Coefficient of thermal expansion	ISO 11359-2	ppm/K, (20-105°C)	20

Electrical Properties:

	Standard	Unit	Value
Volume resistivity	IEC 60093	Ωcm	10 ¹⁵
Dielectric loss factor tan δ	IEC 60250	%, 50 Hz, 25°C	1.0
Dielectric constant ε _r	IEC 60250	--, 50 Hz, 25°C	6.0
Electric strength (3mm plate)	IEC 60243-1	kV/mm	20
Comparative tracking index	IEC 60112	CTI	275
Comparative tracking index	IEC 60112	CTI-M	250