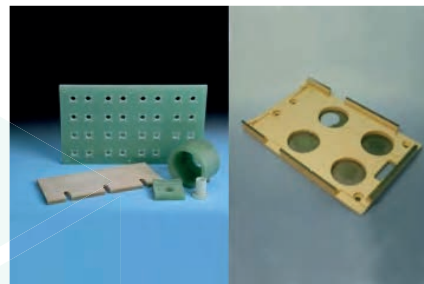
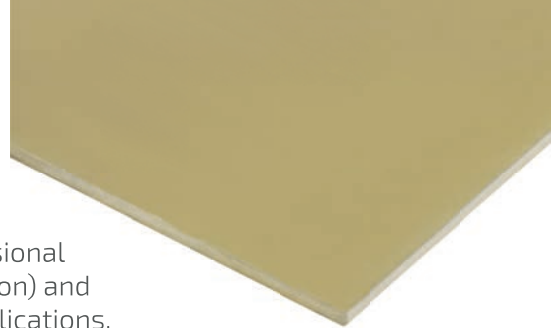




COMPOSITES ●●●

# TERVID EP 155F

Laminated stratified material based on glass fibre and epoxy resin, with excellent mechanical and electrical properties due to its excellent dimensional stability (low moisture absorption and low coefficient of thermal expansion) and resistance to high loads. It is the ideal material for electromechanical applications.



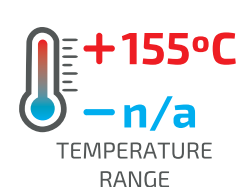
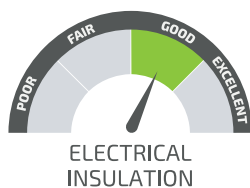
## MAIN CHARACTERISTICS

- ◆ High mechanical resistance
- ◆ High resistance to fatigue
- ◆ Low moisture absorption
- ◆ Excellent dielectric properties

## APPLICATIONS

- ◆ Elements that support very high dynamic efforts
- ◆ High frequency equipment
- ◆ High voltage equipment
- ◆ Circuit breaker cutting chamber
- ◆ Electrical and thermal insulators/separators

# POLY LANEMA





PROPERTIES	TEST METHODS	UNITS	TERVID HEP 155F
DENSITY	ISO 1183	g/cm <sup>3</sup>	1.44
WATER ABSORPTION			
AFTER 24H IMMERSION IN WATER OF 23°C	ISO 62	mg	5/11
		%	5/11
<b>THERMAL PROPERTIES</b>			
TEMPERATURE INDEX (TI)	IEC 60216	°C	245
THERMAL CONDUCTIVITY	DIN 52612	W/m.K	-
COEFFICIENT OF LINEAR THERMAL EXPANSION	VDE 0304	1.0E-6/K	0.29
MAXIMUM ALLOWABLE SERVICE TEMPERATURE			
FOR SHORT PERIODS	-	°C	65 x 10 <sup>-6</sup>
CONTINUOUSLY	-	°C	85 x 10 <sup>-6</sup>
<b>MECHANICAL PROPERTIES AT 23°C<sup>B</sup></b>			
FLEXURAL STRENGTH	ISO 178	MPa	76/-
FLEXURAL RESISTANCE AT 150°C/1H	ISO 178	MPa	76/-
MODULUS OF ELASTICITY	ISO 178	MPa	76/-
CHARPY IMPACT RESISTANCE - NOTCHED	ISO 179	KJ/m <sup>2</sup>	76
RESISTANCE TO FLAT COMPRESSION	ISO 604	MPa	4
FLAT COMPRESSIVE FORCE AT 23°C	ISO 604	MPa	5
FLAT COMPRESSIVE FORCE AT 200°C	ISO 604	MPa	5
TENSILE STRENGTH	ISO 527	MPa	3300
CUTTING VOLTAGE	IEC 60893	MPa	3300
<b>ELECTRICAL PROPERTIES AT 23°C</b>			
INSULATION RESISTANCE AFTER IMMERSION IN WATER	IEC 60167	Ω	21
VOLTAGE FALL AT 90°C IN OIL	IEC 60243-1	kV	21
FLAT ELECTRIC FORCE	IEC 60243-1	kV/mm	> 10 <sup>14</sup>
RELATIVE PERMITTIVITY AT 1MHz	IEC 60250	-	> 10 <sup>14</sup>
DISSIPATION FACTOR AT 1MHz	IEC 60250	-	> 10 <sup>13</sup>
COMPARATIVE TRACKING INDEX (CTI)	IEC 60112	V	> 10 <sup>13</sup>
TRANSVERSE DIELECTRIC RIGIDITY AT OIL	IEC 60243-1	kV/mm	3.4

The properties of the products contained in these data sheets are based on the results of typical tests of the material, which is why there may be some variations. Poly Lanema, Lda. does not guarantee the use of the product or that the information provided in this document is complete, accurate or useful. The customer must test the product to determine its properties and suitability for the intended use. Poly Lanema, Lda. expressly disclaims any liability for any damage, loss, cost or expense to any person, directly or indirectly. The information contained in these data sheets does not represent express or implied warranties, or any implied warranty or fitness for a particular use or purpose. Poly Lanema, Lda. shall not be liable for incidents, such as punitive or consequential damages