

WHALE BRAND TUFNOL TECHNICAL DATA and PHYSICAL PROPERTIES

for Whale Brand TUFNOL Sheet:

PROPERTY	TYPICAL RESULT	UNITS
Cross breaking strength	130	MPa
Impact strength, notched, Charpy	11.5	kJ/m ²
Compressive strength, flatwise	310	MPa
Compressive strength, edgewise	200	MPa
Shear strength, flatwise	90	MPa
Tensile strength	68	MPa
Young's modulus	6.3	GPa
Water Absorption		
- 1.6mm thk.	90	mg
- 3mm thk.	105	mg
- 6mm thk.	130	mg
- 12mm thk.	160	mg
Electric strength, flatwise in oil at 90°C		
- 1.6mm thk.	4.5	MV/m
- 3mm thk.	2.6	MV/m
- 6mm thk.	2.0	MV/m
Electric strength, edgewise in oil at 90°C	12	kV
Insulation resistance after immersion in water	1x10 ⁸	ohms
Relative density	1.36	-
Maximum working temperature**		
- continuous	120	°C
- intermittent	130	°C
Thermal classification	Class E	-
Thermal conductivity through laminae	0.32	W/(mK)
Thermal expansion in plane of laminae	2.2	X 10 ⁻⁵ / K
Specific heat	1.5	kJ/(kgK)
Test methods as BS EN 60893-2, where applicable.		

for Whale Brand TUFNOL Round Tube:

PROPERTY	TYPICAL RESULT	UNITS
Axial compressive strength	170	MPa
Cohesion between layers	130	MPa
Water absorption	3.2	mg/cm ²
Insulation resistance after immersion in water	1x10 ⁷	ohms
Relative density	1.35	-
Test methods as BS EN 61212-2, where applicable.		

for Whale Brand TUFNOL Round Rod:

PROPERTY	TYPICAL RESULT	UNITS
Flexural strength	130	MPa
Water absorption	3.3	mg/cm ²
Insulation resistance after immersion in water	1x10 ⁷	ohms
Axial electric strength in oil at 90°C	4	kV
Relative density	1.35	-
Test methods as BS EN 61212-2, where applicable.		

**Users of highly stressed components at temperatures approaching the maximum are recommended to seek further advice from www.theplasticshop.co.uk

The information given here is believed to be correct, but completeness and accuracy are not guaranteed. The user shall be fully responsible for determining the suitability of products for the intended use.