KITE BRAND TUFNOL
TECHNICAL DATA and PHYSICAL PROPERTIES

for Kite Brand TUFNOL Sheet:

PROPERTY	TYPICAL RESULT	UNITS
Cross breaking strength	175	MPa
Impact strength, notched, Charpy	2.7	kJ/m^2
Compressive strength, flatwise	350	MPa
Compressive strength, edgewise	200	MPa
Resistance to flatwise compression	1.2	%
Shear strength, flatwise	105	MPa
Water Absorption		
- 1.6mm thk.	39	mg
- 3mm thk.	47	mg
- 6mm thk.	56	mg
- 12mm thk.	70	mg
Electric strength, flatwise in oil at 90°C		
- 1.6mm thk.	14.5	MV/m
- 3mm thk.	13	MV/m
- 6mm thk.	8.8	MV/m
- 12mm thk.	6.1	MV/m
Electric strength, edgewise in oil at 90°C	55	kV
Insulation resistance after immersion in water	$1x10^{10}$	ohms
Loss tangent at 1 MHz	0.037	-
Permittivity at 1 MHz	5.1	-
Relative density	1.36	-
Maximum working temperature**		
- continuous	90	°C
- intermittent	120	°C
Thermal classification	Class E	-
Thermal conductivity through laminae	0.26	W/(mK)
Thermal expansion in plane of laminae	1.8	$x\ 10^{-5}/K$
Specific heat	1.5	kJ/(kgK)

Test methods as BS EN 60893-2, where applicable.

for Kite Brand TUFNOL Round Tube:

PROPERTY	TYPICAL RESULT	UNITS
Axial compressive strength	190	MPa
Cohesion between layers	110	MPa
Water absorption	1.0	mg/cm^2
Insulation resistance after immersion in water	$1x10^9$	ohms
Axial electric strength in oil at 90°C	40	KV
Radial electric strength in oil at 90°C		
- 1.6mm wall	8	MV/m
- 3mm wall	6	MV/m
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.