INSULOFIBRE Pvt. Ltd.

Technical Specification for Epoxy Pultruded Rods

SR. NO.	CHARACTERISTIC	STANDARD	UNIT	SPECIFIED VALUES
A	**GENERAL REQUIREMENT**			
1	MATERIAL	-	-	ECR
2	GRADE	-	-	EPOXY
3	COLOUR	-	-	NATURAL
B	**PHYSICAL PROPERTIES**			
1	SPECIFIC GRAVITY	ASTM D 792 - 2008		2.0 ± 0.1
2	GLASS CONTENT (BY WEIGHT)	ISO 1172:1996		80% (MIN.)
3	DIE PENETRATION	IEC - 61109-2008	Minutes	> 15
4	WATER ABSORPTION	ASTM D 570 - 81	%	0.1 MAXIMUM
C	**MECHANICAL PROPERTIES**			
1	TENSILE STRENGTH	ASTM D 638 - 1991	mPA	1000 (10200 Kgf./ Cm^2)
2	FLEXUREL STRENGTH	ASTM D 790 - 1992	mPA	600 (6100 Kgf./ Cm^2)
3	COMPRESSIVE STRENGTH	ASTM D 695 - 1991	mPA	500 (5100 Kgf./ Cm^2)
4	IMPACT STRENGTH (IZOD)	ASTM D 256 - 2006	Kj / Mtr^2	400 MIN.
5	HARDNESS	ASTM D 2583 - 1986	Barcol Nos.	65 MIN.
6	STRESS CORROSION (1mol / 1HNO3 at 80% SML)	REC CI No.2	Hours	96

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D	**ELECTRICAL PROPERTIES**			
1	DIE ELECTRIC STRENGTH (AXIAL) IN 900 C OIL	ASTM D 149 - 2009	Kv/ 25mm	50
2	DIE ELECTRIC STRENGTH (RADIAL) IN 900 C OIL	ASTM D 149 - 2009	KV / mm	10
3	DIE ELECTRIC CONSTENT 500V / 50 Hz. / 25 C0	IEC - 60250 - 1969		5
4	DIE ELECTRIC DISSIPATION FACTOR 500V / 50 Hz. / 25 C0	IEC - 60112 - 2003		0.013
5	COMPARATIVE TRACKING INDEX	IEC - 60112 - 2003	KV	600 MIN
6	SURFACE RESISTIVITY	ASTM D 257 - 2007	ohms	1.1×10^{13}
7	VOLUME RESISTIVITY	ASTM D 257 - 2007	ohms - Cm	10 14
8	WATER DIFFUSION	IEC - 61109	m.A.	1 m.A. (MAX)
E	**THERMAL PROPERTIES**			
1	MARTENS HEAT DISTROTION	DIN - 53462 - 1987	C°	200 MIN