

Technical Data Sheet

Glastic® 1580/1583

Typical characteristics

- NEMA GPO-3
- Highly Flame Resistant
- Flame-Resistant Meets UL94 VO

Typical industries

- Generator and Motor
- Dry transformers
- 전기 산업
- Electrical Insulating Components
- Switchgear
- 전자 제품

	Test method	Unit	Guideline value
General properties			
Specific Gravity	ASTM D 792		1.83
Part Number			1580 (1583)
NEMA Grade LI 1-1989	NEMA LI-1		GPO-3
Standard Color			White (Red)
UL Temperature Index - Electrical	UL 746B	°C	120
UL Temperature Index - Mechanical	UL 746B	°C	140
UL Recognition File Number			E81928
Mechanical properties			
Flexural Strength	ASTM D 790	psi	24,600
Flexural Strength @130°C	ASTM D 790	psi	8,470
Compressive Strength	ASTM D 695	psi	31,200
Tensile Strength	ASTM D 638	psi	8,400
IZOD Impact Strength (notched)	ASTM D 256	ft. lb./in.	8.9
Shear Strength	ASTM D 732	psi	12,000
Thermal properties			
Coefficient of Thermal Expansion	ASTM D 696	(in./in.°C) x 10-5	2
Thermal Conductivity	ASTM C 177		1.9
Flame resistance properties			
UL Subject 94	UL 94		VO



	Test method	Unit	Guideline value
UL Hot Wire Ignition	UL 746A	sec.	300+
UL High Amp Ignition	UL 746A		200+
Oxygen Index	ASTM D 2863	%O ₂	39
Ignition Time		sec.	84
Burn Time		sec.	23
Physical properties			
Water Absorption	ASTM D 570	% by wt.	0.2
Dielectrical properties			
Electrical Strength - Perpendicular S/T in Air	ASTM D 149	Vpm	425
Electrical Strength - Perpendicular S/T in Oil	ASTM D 149	Vpm	577
Electrical Strength - Parallel S/S in Oil	ASTM D 149	kV	47
Arc Resistance	ASTM D 495	sec.	181
IEC Track Resistance (CTI)	UL 746A	V	500+
Permittivity, 60 Hz	ASTM D 150		4.2
Dissipation Factor, 60 Hz	ASTM D 150		0.011
Dissipation Factor, MHz	ASTM D 150		0.010
Permittivity, MHz	ASTM D 150		4
Insulation Resistance	ASTM D 257	Ω x 10 ¹²	823

All of the information, suggestions, and recommendations pertaining to the properties and uses of the Röchling Glastic Composites products described herein are based upon tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the use contemplated, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. THERE IS NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Under no circumstances shall we be liable for incidental or consequential loss or damage. Glastic® is a registered trademark of Röchling Glastic Composites. UL® is a registered trademark of Underwriters Laboratories, Inc.

