

TECHNICAL DATA SHEET

PSU

I. Physical Properties		Test method	Unit	Value
1. Specific gravity		ASTM D792	g/cm ³	1.23
2.a Water Absorption (saturation)				0.8
		ASTM D570	%	
2.b Humidity Absorption (saturation)				0.3
3.a Maximum permissible service temp.				320
		UL 746B	°F	
3.b Lower permissible service temp.				-148
II. Mechanical Properties				
1. Tensile strength at yield			psi	10,900
2. Tensile Modulus		ASTM D638		-
3. Elongation at yield			%	5.7
4. Tensile strength at break			psi	-
5. Elongation at break			%	-
6. Impact strength		ASTM D256	ft-lb/in	n.b.
7. Notch impact strength			ft-lb/in	1.6
8. Ball indentation / Rockwell hardness		ASTM D785	R-Scale	-
9. Shore-D		ASTM D2240	-	-
10. Flexural strength				-
		ASTM D790	psi	
11. Flexural Modulus				377,000
III. Thermal Properties				
1. Vicat-softening point	VST/B/50			-
		ASTM D1525	°F	
	VST/A/50			-
2. Heat deflection temperature HDT/B (66 psi)		ASTM D648	°F	-
	HDT/A (264 psi)			347
3. Coefficient of linear thermal expansion		ASTM D696	in/in/°F*10 ⁻⁵	3.1
4. Thermal conductivity at 73 °F		ASTM C177	BTU/hr-ft*°F	-
5. Glass transition temperature				374
6. Melting temperature		ASTM D3418	°F	374
IV. Electrical Properties				
1. Volume resistivity		ASTM D257	W*cm	≥1013
2. Surface resistivity			W	≥1013
3. Dielectric constant at 1MHz		ASTM D150	-	3.1
4. Dielectric loss factor at 1 MHz			-	0.006

5. Dielectric strength		ASTM D149	V/mil	940
6. Tracking resistance		IEC 60112	Grade	CTI 125
V. Additional Data				
1. Bondability		-	-	yes
2. Compliances		FDA	-	yes
		NSF	-	51+61
3. Flammability		UL 94	-	HB
4. Limited Oxygen Index (LOI)		ASTM D2863	%	32
5. UV stabilization		-	-	no

Properties:

- High operating temperature (160°C)
- Very good resistance to hydrolysis (suitable for repetitive steam sterilisation)
- High toughness, even at low temperatures.
- High dimensional stability.
- Good electrical insulation.
- High mechanical strength.
- High rigidity.

Disclaimer:

All statements, technical information and recommendations contained in this publication are for informational purposes only. Cut To Size Plastics Pty. Ltd. does not guarantee the accuracy or completeness of any information contained herein and it is the customer's responsibility to conduct its own review and make its own determination regarding the suitability of specific products for any given application.