

Technical Data Sheet

GEHR Acetal®



I. Physical Properties

	Test method	Unit	Value
1. Specific gravity	ASTM D792	g/cm ³	1.4
2.a Water Absorption (saturation)	ASTM D570	%	0.8
2.b Humidity Absorption (saturation)			0.2
3.a Maximum permissible service temp.	UL 746B	°F	195
3.b Lower permissible service temp.			-40

II. Mechanical Properties

1. Tensile strength at yield	ASTM D638	psi	8,700
2. Tensile Modulus		-	
3. Elongation at yield		%	15
4. Tensile strength at break		psi	-
5. Elongation at break		%	30
6. Impact strength	ASTM D256	ft-lb/in	-
7. Notch impact strength		ft-lb/in	1.55
8. Ball indentation / Rockwell hardness	ASTM D785	R-Scale	78
9. Shore-D	ASTM D2240	-	85
10. Flexural strength	ASTM D790	psi	11,600
11. Flexural Modulus			334,000

III. Thermal Properties

1. Vicat-softening point	VST/B/50	ASTM D1525	°F	324
	VST/A/50			-
2. Heat deflection temperature	HDT/B (66 psi)	ASTM D648	°F	312
	HDT/A (264 psi)			217
3. Coefficient of linear thermal expansion		ASTM D696	in/in/°F *10 ⁻⁵	13
4. Thermal conductivity at 73 °F		ASTM C177	BTU/hr-ft*°F	-
5. Glass transition temperature		ASTM D3418	°F	-85
6. Melting temperature				330

IV. Electrical Properties

1. Volume resistivity	ASTM D257	Ω*cm	5.5E+13
2. Surface resistivity		Ω	5.005E+13
3. Dielectric constant at 1MHz	ASTM D150	-	3.7
4. Dielectric loss factor at 1 MHz		-	0.006
5. Dielectric strength	ASTM D149	V/mil	480
6. Tracking resistance	IEC 60112	Grade	CTI 600

V. Additional Data

1. Bondability	-	-	no
2. Compliances	FDA	-	yes
	NSF	-	51 + 61
3. Flammability	UL 94	-	HB
4. Limited Oxygen Index (LOI)	ASTM D2863	%	18
5. UV stabilization	-	-	no

All values are attributes of the used raw materials.

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