

# Technical Data Sheet

## GEHR PVC Type I<sup>®</sup>



### I. Physical Properties

	Test method	Unit	Value
1. Specific gravity	ASTM D792	g/cm <sup>3</sup>	1.38
2.1 Water saturation	ASTM D570	%	-
2.2 Water equilibrium (50% RH)			-
3.a Maximum permissible service temp.	UL 746B	°F	140
3.b Lower permissible service temp.			5

### II. Mechanical Properties

1. Tensile strength at yield	ASTM D638	psi	7,800
2. Elongation at yield.		%	-
3. Tensile strength at break		psi	-
4. Elongation at break		%	-
5. Impact strength	ASTM D256	ft-lb/in	-
6. Notch impact strength		ft-lb/in	2.2
7. Ball indentation / Rockwell hardness	ASTM D785	psi	-
8. Shore-D	ASTM D2240	-	80
9. Flexural strength	ASTM D638	psi	11,000
10. Modulus of elasticity			440,000

### 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)			158
3. Coefficient of linear thermal expansion		ASTM D696	in/in/°F*10 <sup>-5</sup>	3.3
4. Thermal conductivity at 73 °F		ASTM C177	BTU/hr-ft*°F	-
5. Glass transition temperature		ASTM D3418	°F	-
6. Melting temperature				385

### IV. Electrical Properties

1. Volume resistivity	ASTM D257	Ω*cm	-
2. Surface resistivity		Ω/SQ	-
3. Dielectric constant at 1MHz	ASTM D150	-	-
4. Dielectric loss factor at 1 MHz		-	-
5. Dielectric strength	ASTM D149	V/mil	-
6. Tracking resistance	IEC 60112	Grade	-

### V. Additional Data

1. Bondability	-	-	yes
2. Physiological indifference	FDA	-	on request
	NSF	-	14 + 61
3. Flammability	UL 94	-	+
4. UV stabilisation	-	-	on request

+\* = tested with formulation for rods up to 7" diameter, grey (profiles are tested but not listed)

All values are attributes of the used raw materials.

The physical data contained in this table are typical values. They are obtained on test specimens under specific conditions and represent average values of a large number of tests. The results obtained on these test specimens cannot be applied to finished parts without reservations, as behaviour is influenced by processing and shaping. Reproduction only with our definite permission.