Technical Data Sheet
GEHR PVC-U

I. Physical Properties

	Test method	Unit	Value
1. Specific gravity	ISO 1183	g/cm³	1,36
2. Water absorption	ISO 62	%	0,2
3. Chemical resistance	-	-	DIN 8061
4. Maximum permissible service temp.			
(no stronger mechanical stress involved)	-		
Upper temperature limit	-	°C	60
Lower temperature limit	-	°C	-15

II. Mechanical Properties

	Test method	Unit	Value
1. Tensile strength at yield	ISO 527	MPa	55
2. Elongation at yield.	ISO 527	%	3
3. Tensile strength at break	ISO 527	MPa	30
4. Elongation at break	ISO 527	%	> 10
5. Impact strength	ISO 179	kJ/m^2	no break
6. Notch impact strength	ISO 179	kJ/m^2	3
7. Ball indentation / Rockwell hardness	ISO 2039-1	MPa	120
8. Shore-D	DIN 53505		82
9. Flexural strength	ISO 178	MPa	90
10. Modulus of elasticity	ISO 527	MPa	3000

III. Thermal Properties

		Test method	Unit	Value
1. Vicat-softening point	VST/B/50	ISO 306	°C	75[1)]
	VST/A/50		°C	-
2. Heat deflection temperature	HDT/B	ISO 75	°C	72[2)]
	HDT/A		°C	-
3. Coefficient of linear thermal expansion		DIN 53752	$K^{-1}*10^{-4}$	0,8
4. Thermal conductivity at 20 °C			W/(m∗K)	0,14

IV. Electrical Properties

	Test method	Unit	Value
1. Volume resistivity	VDE 0303	Ω∗cm	$>10^{15}$
2. Surface resistivity		Ω	$\geq 10^{13}$
3. Dielectric constant at 1MHz		-	3
4. Dielectric loss factor at 1 MHz	DIN 53483	-	0,01
5. Dielectric strength	VDE 0303	kV/mm	20-40
6. Tracking resistance	IEC 60112	-	KB 600

V. Additional Data

	Test method	Unit	Value
1. Bond ability		-	+
2. Friction coefficient	DIN 53375	-	0,6
3. Flammability	UL 94	-	V-0
4. UV stabilisation	-	-	Fair

[1)] 65 (solid rod 160 - 200 mm ∅) 57 (solid rod 220 - 300 mm ∅) [2)] 59 (solid rod 160 - 200 mm ∅) 51 (solid rod 220 - 300 mm ∅)
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 this tests specimens cannot be applied to finished parts without reservations, as behaviour is influenced by processing and shaping. Reproduction only with our definite permission.