Flame Retardant, Chemical Resistant, Engineering Plastic

Service. Quality. Value.

	PVC-U	PVC-Hi	PVC-ELS	PVC-C Corzan®	
Mechanical Properties					
Density	1.36	1.38	1.41	1.55	g/cc
Tensile Strength @ yield	55	49	40	57	MPa
@ break	30	30	36	80	MPa
Elongation @ yield	3	10	4	3	%
@ break	≥10	30	20	15	%
Tensile modullus of elasticity	3000	2600	3000	2500	MPa
Flexural Strength	90	80	-	90	MPa
Impact Strength	No break	No break	-	No brk	kj/m^2
Notched impact strength	3	10	5	8	kj/m^2
Ball indentation hardness / Rockwell	120	100	-	150	MPa
Hardness (Shore D)	KB600	KB600	-	KB600	V
Electrical Properties					
Volume resistivity	$\geq 10^{15}$	$\geq 10^{15}$	$\leq 10^{6}$	$\geq 10^{15}$	Ohm cm
Surface resistivity	$\geq 10^{13}$	$\geq 10^{13}$	$\leq 10^{6}$	$\geq 10^{13}$	Ohm
Dielectric constant @ 1 MHz	3.0	3.0	-	3.0	-
Dielectric loss factor @ 1 MHz	0.01	0.01	-	0.01	-
Dielectric strength	20 - 40	20 - 40	-	20 - 40	Kv/mm
Tracking resistance – IEC 60112	KB600	KB600	-	KB600	V
Thermal Properties					
Vicat softening point (VST/B/50)	75[1]	78	-	105	°C
Heat deflection temperature (HDT/B)	72[2]	69	-	102	°C
Coefficient of thermal expansion	0.8	0.8	-	0.6	10^{-4}/ °C
Thermal conductivity @ 20°C	0.14	0.17	-	0.14	W/(mK)
Service temperatures - upper limit	60	60	60	85	°C
without high mech. Load - lower limit	-15	-40	-15	-15	~
Other Properties					
Moisture Absorption - ISO 62	0.20	0.20	-	0.20	%
Suitability for bonding	+	+	+	+	-
Physiological indifference according to FDA or EEC 90/128 - natural colour	+	-	-	-	
Friction Co-efficient	0.6	0.6	0.6	0.6	DIN 53375
Flammability - Underwriters Laboratory	V-0	V-0	V-0	V-0	UL 94
UV Stability with additives	0	0	-	-	-