

MECHANICAL PROPERTIES

Abbreviation	Additive or color	Temperature of use	Density	Yield stress	Breakdown voltage	Modulus of elasticity (tension)	Modulo di elasticità (trazione)	Modulus of elasticity (bending)	Hardness test	Breaking strength	Resistance elongation	Wear creep
		°C	g/cm ³	MPa	MPa	N	MPa	MPa	MPa	MPa	MPa	µNm
PTFE	natural	260	2,18	25		>50	700		30	5	1,58	21
PA6	natural	100	1,13	85/60		70/200	3000/1800		160/70	45	4,5	0,23
PC	trasparent	120	1,2	60			2300		100	48	18	22
PET	natural, black	110	1,37	88			3200		95		13	0,35
POM-C	natural, black	100	1,41	62		30	2700		145	40	13	8,9
PP	black, grey	100	0,91	30		>50	1600		80	22	4	11
PEHMV	natural	90	0,95	25	40	>50	1100	900	52			
PEEK	natural, black	260	1,30	95		25	3000	4100	M99 (j)			
EPDM	black	100	1,2		35	350			70	10		
PU	red		1,26			430			90			
PKC	natural, grey, black, rec.		1,42	55	30		3000			30	18	
PMMA	trasparent	85	1,19	120	70	4	3200				4	11

THERMAL PROPERTIES

Melting temperature	Glass transition temperature	Hot dimensional stability (met. A)	Hot dimensional stability (met. B)	Use temperature limit	Thermal conductivity	Heat capacity	Coefficient of thermal expansion
°C	°C	°C	°C	°C	W/K.m	J/K.m	10 ⁻⁶ /K
327	-20	55	121	260	0,25	1	12
220	60/5	75	190	160	0,23	1,7	8
	148	135	140	140	0,19	1,2	7
255	70	95	170	170	0,24	1,1	7
165	-60	110	160	140	0,31	1,5	10
165	-18	65	105	130	0,22	1,7	17
136	44		-70	120	0,41	1,84	20
340	140	140	182	300	0,25	0,32	5
				100			
86	75			60	0,14		8
				85	0,19	1,47	7

ELECTRICAL PROPERTIES

VARIOUS PROPERTIES

Constant dielectric	Dielectric loss factor	Specific bulk resistivity	Surface resistivity	Rigidity dielectric	Resistance to leakage current	Moisture absorption	Water absorption (until saturation)	Combustibility
abs	Tanδ	Ω.cm	Ω	kV/mm	classe	%	%	
2,1	0,002	10 ¹⁶	10 ¹⁶	45	VA 3 c X3-600	<0,5		VO
3,7	0,031-0,300	10 ¹⁵	10 ¹⁶	20/50	CT1600	3	6,5	HB
3	0,006	10 ¹⁵	10 ¹⁶	27	KA 1	0,15	0,36	HB
3,2	0,0021	10 ¹⁶	10 ¹⁶	60	KC 250	0,25	0,5	HB
3,5	0,003	10 ¹⁶	10 ¹⁶	>80	KA 3c	<0,3	0,5	HB
2,25	0,002	>10 ¹⁶	>10 ¹⁶	>40	KA 3c O-600	<0,1	<0,1	HB
2,9	0,0004	10 ¹⁵	10 ¹⁶	>150	KC-600	0,1	0,2	HB
3,2/3,3	0,001-0,004	10 ¹⁶	10 ¹⁶	20		0,1	0,5	VO
		10 ¹⁷						
3	0,01	10 ¹⁵	10 ¹⁶	35		0,2	0,2	VO
	0,06	10	10 ¹⁶	30				