- VALUES -

PROPERTY	Standard	Units	Standard	Reinforced	Polar	Super Polar	Anti-Insect	Anti-static	Fire retardant	Super UV resistant	85 Sh.A	Colored	Screenflex
Light transmittance	ASTM D 1003	%	**85**	**70**	**85**	**85**	**< 80**	**85**	**85**	**80**	**85**	**0 to 80**	**≤ 13**
Shore A hardness	EN ISO 868	Sh A	80	80	65	62	80	80	80	80	**85**	65 to 85	80
Tearing resistance	DIN 53515	N/mm	50	**80**	28	25	50	50	65	50	**65**	28 to 65	55
Tensile strength at break	ASTM D 638 EN ISO 527	N/mm²	16	16	12	10	16	16	20	16	20	12 to 20	18
Elongation at break		%	340	340	390	420	340	340	280	340	280	280 to 390	300
Residual elong. (after break)		%	68	60	76	80	68	68	60	68	60	60 to 76	62
Thermal conductivity	ASTM C 177	W/m.K	**0,16**	**0,16**	**0,16**	**0,16**	**0,16**	**0,16**	**0,16**	**0,16**	**0,16**	**0,16**	**0,16**
Cold bend brittle temp.	ISO 8570	°C	-35	-35	**-40**	**-65**	-35	-35	-20	-35	-20	-20 to -40	-25
Min. usage temp.	EN 1876	°C	-15	-15	**-25**	**-60**	-15	-15	0	-15	0	-15 to -25	-15
Max. usage temp.		°C	+50	+50	**+30**	**+15**	+50	+50	+50	+50	+50	+30 to +50	+50
Vicat softening temp.	EN ISO 306	°C	50	50	**48**	**46**	50	50	50	50	50	48 to 50	50
Specific heat capacity	ISO 11357	kJ/kg.K	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6	1,6
Sound reduction	DIN 52210	dB	**>35**	**>35**	**>35**	**>35**	**>35**	**>35**	**>35**	**>35**	**>35**	**>35**	**>35**
Reaction to fire	EN 13501-1:2007	Classe	-	-	-	-	-	-	**Bs3,d0 Cs3,d0**	-	-	-	**EN 1598**
UV resistance	ISO4892	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**High**	Yes	Yes	**High**
Charge buildup	IEC 61087	Sparks	Yes	Yes	Yes	Yes	Yes	**No**	Yes	Yes	Yes	Yes	Yes
Surface resistivity	IEC 60093	Ω/□	4.10^{13}	4.10^{13}	4.10^{13}	4.10^{13}	4.10^{13}	$\mathbf{2.10^{12}}$	4.10^{13}	4.10^{13}	4.10^{13}	4.10^{13}	4.10^{13}
Water absorption	EN ISO 62	%	-0,2	-0,2	-0,2	-0,2	-0,2	1 to 1,6	-0,2	-0,2	-0,2	-0,2	-0,2
Anti-insect	-	-	No	No	No	No	**Yes**	No	No	No	No	No	No
Density	ASTM D 792	g/cm³	1,22	1,23	1,18	1,18	1,22	1,22	1,33	1,22	1,29	1,2 to 1,5	1,2 to 1,3

- DESCRIPTIONS -

PROPERTY	Standard	Description
Light transmittance	ASTM D 1003	Visible light rate transmitted through the material.
Shore A hardness	EN ISO 868	Index based on a flat indenter's penetration depth. Scale from 0 (Soft) to 100 (Hard).
Tearing resistance	DIN 53515	Minimum tensile stress required to tear a pre-slit sample.
Tensile strength at break	ASTM D 638 EN ISO 527	Maximum tensile stress that a material can be subjected to before break.
Elongation at break		Elongation of the specimen at the break point under tensile stress.
Residual elong. (after break)		Permanent elongation of the specimen measured after rupture in a tensile test.
Thermal conductivity	ASTM C 177	Ability to conduct heat. The Lower it is, the more insulation.
Cold bend brittle temp.	ISO 8570	Temperature at which the specimen break under torsion stress. Brittle point (CLASH & BERG).
Min. usage temp.	EN 1876	Temperature range where material keep its mechanical properties (flexibility).
Max. usage temp.		
Vicat softening temp.	EN ISO 306	Temperature at which the specimen is penetrated to a depth of 1 mm by a 1 kg flat indenter of 1 sq. mm.
Specific heat capacity	ISO 11357	Heat energy required to increase the temperature of one kilogram of the material by one degree Celsius.
Sound reduction	DIN 52210	Average sound level (freq. 0,1 to 3,2 kHz) decreased by a 1,76 sq.m. and 5 mm thick PVC curtain.
Reaction to fire	EN 13501-1:2007	Standard classifications of material self-extinguishing and resistance to combustion.
UV/IR filter	EN 1598	Ability to filter welding rays allowing the use of this material as a welding protection screen.
UV resistance	ISO4892	Ability to resist to UV (Sun, welding arc).
Charge buildup	IEC 61087	Earthed sample is rubbed with cotton, acrylic and nylon rubbers. At electrode approach, spark appears or doesn't.
Surface resistivity	IEC 60093	Material surface electric resistivity measured with a 500 V direct voltage.
Water absorption	EN ISO 62	Material mass variation after exposure to humid conditions. (<0 if released / >0 if absorbed)
Anti-insect	-	Special ability to keep insects away.(Food processing plants, tropical regions)
Density	ASTM D 792	Mass per unit volume.