



## CoruSuperPolar Super Polar Low Temperature Flexible PVC

Property	Standard	Units	Standard	Description
Light Transmittance	ASTM D 1003	%	85	Visible light rate transmitted through the material.
Shore A Hardness	EN ISO 868	Sh A	62	Index based on a flat indenter's penetration depth. Scale from 0 (Soft) to 100 (Hard)
Tearing Resistance	DIN 53515	N/mm	25	Minimum tensile stress required to tear a pre-slit sample.
Tensile Strength At Break	ASTM D 638 EN ISO 527	N/mm <sup>2</sup>	10	Maximum tensile stress that a material can be subjected to before break.
Elongation At Break		%	420	Elongation of the specimen at the break point under tensile stress.
Residual Elong. (After Break)		%	80	Permanent elongation of the specimen measured after rupture in a tensile test
Thermal Conductivity	ASTM C 177	W/m.k	0.16	Ability to conduct heat. The lower it is, the more insulation.
Cold Bend Brittle Temp.	ISO 8570	°C	-65	Temperature at which the specimen breaks under torsion stress. Brittle point (Clash-Berg)
Min. Usage Temp	EN 1876	°C	-60	Temperature range where material keeps its mechanical properties (flexibility).
Max. Usage Temp		°C	+15	
Vicat Softening Temp.	EN ISO 306	°C	46	Temperature at which the specimen is penetrated to a depth of 1mm by a 1kg flat indenter of 1sq. mm.
Specific Heat Capacity	ISO 11357	kJ/kg.K	1.6	Heat energy required to increase the temperature of one kilogram of the material by one degree Celsius.
Sound Reduction	DIN 52210	dB	>35	Average sound level (freq. 0.1 to 3.2kHz) decreased by a 1.76sq.m. and 5mm thick PVC curtain.
Reaction To Fire	EN 13501-1:2007	Class	-	Standard classifications of material self-extinguishing and resistance to combustion.
UV/IR Filter	EN 1598 & ISO 25980	-	-	Ability to filter welding rays allowing the use of this material as a welding protection screen.
UV Resistance	ISO 4892	-	Yes	Ability to resist to UV (Sun, welding arc).
Surface Resistivity	ASTM D257	10 <sup>10</sup> Ω/sq	3	Material surface electric resistivity measured with a 100V direct voltage.
Water Absorption	EN ISO 62	%	-0.2	Material mass variation after exposure to humid conditions. (<0 if released / >0 if absorbed)
Anti-Insect	-	-	No	Special ability to keep insects away. (Food processing plants, tropical regions)
Density	ASTM D 792	g/cm <sup>3</sup>	1.18	Mass per unit volume.