

POLYPROPYLENE FOR CABLES

Solid and expandable Polypropylene based compounds specifically designed for insulation of data or power cables. Recommended for cable with higher electrical properties and higher operating temperature.



POLYPROPYLENE FOR CABLES

Properties	Test Method	Unit	Propylplus 700	Propylplus 703	Propylplus 703/S	Propylplus 705	Propylplus 707E	HPB 011/5
Density	ISO 1183	g/cm ³	0,9	0,9	0,9	0,87	0,9	1,2
Hardness at 15°	ISO 868	Shore D	61	49	49	39	61	54
Tensile strength at break (v = 50 mm/min)	ISO 527	N/mm ²	28	25	25	22	28	15
Elongation at break V = 50 mm/min)	ISO 527	%	750	700	700	700	750	400
Pressure test at 120°C	IEC 60811	%	< 50	< 50	< 50	-	-	-
Melt Flow Index (2,16Kg at 230°C)	ISO 1133	g/10 min	4	2	2	0,5	8*	4
Volume Resistivity 20°C (Alternating Polarity Method)	ASTM D257 Electrodes	s Ωcm	> 1 x 10 ¹⁷	> 1 x 10 ¹⁶	> 1 x 10 ¹⁶	> 1 x 10 ¹⁶	> 1 x 10 ¹⁷	> 5 x 10 ¹⁵
Dielectric Constant (1 MHz)	-	-	2,28	2,26	2,30	2,26	2,26	-
Vicat (10N)	ISO 306	°C	151	104	104	-	150	-
Emission of Halogenidric acids	IEC 60754-1	%	<0,5%	<0,5%	<0,5%	<0,5%	<0,5%	<22%
Oxygen Index	IEC 4589	%	-	-	-	-	-	24
Description			Solid Polypropylene	Solid Polypropylene (flexible)	Solid Polypropylene (flexible) more stabilized	Solid Polypropylene (flexible)	Expandable Polypropylene	ISO 6722 Class C (125°C)

* Test made with 5 Kg.at 180°C

Notes

Propylplus is a range of polypropylene based compounds specially designed for those applications requiring superior thermo-mechanical properties, outstanding heat resistance and high electrical properties. They can be used as primary insulation on multimedia, telecom, instrumentation wires, optical fiber cables and other applications where extremely thin wall thickness must comply with high performing properties.

Packaging

Propylplus is sold in 20 Kg. Plastic sacks on pallet of Kg. 1000 Oktabins

Processing

These compounds have been formulated for an easy processing, and optimal output can be generally achieved on extruders with L ≥ 20D. Processing conditions and parameters can vary depending on type of extruder/equipment used. As general guidance we recommend the following temperature profile:

