Polylink Power Cable PP 409/401 (S)

Crosslinked Polyethylene

Polylink Polymers (India) Ltd.

Message:

A silane grafted Crosslinkable polyethylene compound, curable by exposure to moisture, for insulation of power cables and possessing excellent extrudability at high output rate.
PP 409 has been specially developed for cables up to 72 KV. The special formulation and compounding techniques used ensures that the contamination level is kept within the required limits for this voltage grade.
PP 409 has general melt index range of 0.7 - 1.0 which provides firm stability during extrusion, especially for the thick insulations required for high voltage.
DESCRIPTION :
This compound utilizes the system for crosslinking of polyethylenes developed by DOW coming and known as sioplas. It is a two-component system comprising a silylated ethylene polymer known as the graft copolymer PP 409, and a masterbatch PP401 containing a crosslinking catalyst. The two materials normally used in the ratio of 95 parts graft to 5 parts catalyst masterbatch.

General Information			
Features	Crosslinkable Good processing stability		
Uses	Cable sheath High voltage insulation Medium voltage insulation		
Forms	Particle		
Processing Method	Extrusion		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	0.925	g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.75	g/10 min	ASTM D1238
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (Break)	14.5	MPa	IEC 60811
Tensile Strain (Break)	400	%	IEC 60811
Aging	**Nominal Value**	**Unit**	**Test Method**
Change in Tensile Strength in Air (135°C, 168 hr)	15	%	IEC 60811
Change in Tensile Strain at Break in Air (135°C, 168 hr)	10	%	IEC 60811
Thermal	**Nominal Value**	**Unit**	**Test Method**
Thermoset [1]			IEC 60811
Elongation Under Load : 200°C	100	%	IEC 60811
Permanent Elongation after Cooling : 200°C	5.0	%	IEC 60811
Power factor (23°C) [2]	4.00E-4		IEC 250
Electrical	**Nominal Value**	**Unit**	**Test Method**

Volume Resistivity (20°C)	1.4E+17	ohms·cm	IEC 60502
Dielectric Strength	25	kV/mm	IEC 60243-1
Dielectric Constant	2.20		IEC 60250

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	150	°C
Cylinder Zone 2 Temp.	160	°C
Cylinder Zone 3 Temp.	170	°C
Cylinder Zone 4 Temp.	180	°C
Adapter Temperature	190	°C
Die Temperature	190	°C

Extrusion instructions
Screw water temperature : 60 to70°CScreens : 30,100,30(mesh apertures per linear inch)L/D Ratio: 20Compression: 2.5:1

NOTE	
1.	15 min, 0.2 N/mm^2
2.	50 Hz

Recommended distributors for this material

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