Polylink Polymer PP 408-401-P-10040-B

Crosslinked Polyethylene

Polylink Polymers (India) Ltd.

Message:

This compound utilizes the system for cross linking of polyethylene developed by DOW Corning and known as Sioplas. It is a three component system comprising a silylated ethylene polymer known as the graft copolymer PP 408, a tin based cross-linking catalyst master batch PP 401 and also a master batch P-10040-B containing lubricant, UV ingredient and suitable grade of carbon black. These three material are normally used in the ratio of 90 parts graft, 5 parts catalyst master batch and 5 parts special black masterbatches.

Stored separately, these materials are fairly stable but when mixed and exposed to moisture, crosslinking takes place.

This system allows the compound to be extruded as a normal thermoplastic which will then attain a high level of cross linking in the processed from. The finished product has all the properties associated with polyethylene cross linked by other methods.

Silane grafted black cross linkable polythylene for over head cables.

General Information			
Features	Crosslinkable		
	Good processing stability		
Uses	Cable sheath		
Processing Method	Extrusion		
Physical	Nominal Value	Unit	Test Method
Density	0.930	g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.1	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength	19.0	MPa	IEC 60811
Tensile Strain (Break)	550	%	IEC 60811
Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air (135°C, 168 hr)	10	%	IEC 60811
Change in Tensile Strain at Break in Air (135°C, 168 hr)	-10	%	IEC 60811
Thermal	Nominal Value	Unit	Test Method
Thermoset			IEC 60811
Elongation underload	100	%	IEC 60811
Permanent elongation after cooling	5.0	%	IEC 60811
Power factor (23°C) ¹	4.00E-4		IEC 250
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity (20°C)	1.4E+15	ohms·cm	IEC 60502
Dielectric Strength	25	kV/mm	IEC 60243-1
Dielectric Constant	2.30		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	200	°C		
Extrusion instructions				
Screw water temperature: 60 to70°CScreens: 30,80, 30(mesh apertures per linear inch)L/D Ratio: 20Compression: 3.0:1				

NOTE

1. 50 Hz

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