INEOS Wire & Cable BPD8167

Polyethylene

INEOS Olefins & Polymers Europe

Message:

BPD 8167 is a black filled polyethylene compound specially designed for overhead cable insulation. The compound is crosslinked by means of a "one-step" silane process.
BPD 8167 is intended for the insulation of low voltage power cables. Thermal stability is ensured by addition of a carefully controlled quantity of antioxidant. It contains a dispersed carbon black to provide the necessary protection against outdoor weatherability according to the French specification NF C 33 209 Section 6.2 (07/96). The polymer system has been selected to give improved mechanical properties to meet French requirements for neutral phase Câble de Façade, particularly for anchorage and adherence testing (NFC 33209 - 07/96 - sections 6.5 and 6.8).

General Information			
Additive	Antioxidation Carbon black (4%)		
Features	Crosslinkable Good weather resistance Thermal stability, good		
Uses	Low voltage insulation Wire and cable applications		
Agency Ratings	ASTM D 1248, II, Class C, Cat. 5 NF C 33-209		
RoHS Compliance	Contact manufacturer		
Forms	Particle		
Processing Method	Extrusion		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	0.948	g/cm³	ISO 1183/D
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	0.25	g/10 min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (Break)	18.0	MPa	IEC 811-1-1
Tensile Strain (Break)	300	%	IEC 811-1-1
Aging	**Nominal Value**	**Unit**	**Test Method**
Retention of Mechanical Properties - after weathering aging [1]	> 75	%	NF C 33-209
Tensile strength retention-10 days (150°C)	> 75	%	IEC 811-1-2
Retention of Tensile Elongation - 10 days (150°C)	> 75	%	IEC 811-1-2
Thermoset		%	IEC 811-2-1
Hot Elongation [2] (200°C)		%	IEC 811-2-1

Electrical	Nominal Value	Unit	Test Method
Volume Resistivity (23°C)	> 1.0E+3	ohms·cm	ASTM D257
Dielectric Constant (50 Hz)	3.00		ASTM D150
Dissipation Factor (50 Hz)	1.5E-3		ASTM D150

Additional Information	Nominal Value	Unit	Test Method

All the tests have been performed on cables extruded on a Nokia Maillefer BMA 45 30L/D monosil line with 1.5 % of a commercial mixture of vinyl trimethoxysilane, peroxide, crosslinking catalyst (ex : SILCAT R). The cables have been crosslinked 4 hours in water at 80 °C.

Extrusion	Nominal Value	Unit
Drying Temperature	70.0	°C
Drying Time	3.0	hr
Suggested Max Moisture	0.015	%
Cylinder Zone 1 Temp.	140	°C
Cylinder Zone 2 Temp.	150	°C
Cylinder Zone 3 Temp.	160	°C
Cylinder Zone 4 Temp.	170	°C
Cylinder Zone 5 Temp.	190	°C
Melt Temperature	220 - 230	°C
Die Temperature	220	°C

Extrusion instructions
Zone 6 Temperature: 200°CZone 7 Temperature: 210°CHead Temperatures: 210-220-220°CScrew Cooling: 80°C

NOTE	
1.	Retention of tensile strength and elongation.
2.	15 min, 30 N/cm^2

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China