CABELEC® CA4918

Low Density Polyethylene

Cabot Corporation

Message:

CABELEC® 4918 is an electrically conductive compound based on conductive carbon black and a modified low density polyethylene resin. Its electrical and mechanical properties are permanent and are not dependent on atmospheric conditions.
CABELEC® 4918 has been specially designed for packaging and product handling applications where freedom from the hazard of electrostatic discharge is necessary. Examples of use are in handling of explosive powders, pigments and electronic components.

General Information	
Additive	Carbon Black
Features	Electrically Conductive
Uses	Electrical/Electronic Applications Packaging
Agency Ratings	EC 1907/2006 (REACH)
Appearance	Black
Forms	Pellets
Processing Method	Blown Film Film Extrusion

Physical	Nominal Value	Unit	Test Method
Specific Gravity [1]	1.06	g/cm³	Internal Method
Melt Mass-Flow Rate (MFR) [2]			ISO 1133
190°C/10.0 kg	3.5	g/10 min	
190°C/5.0 kg	0.80	g/10 min	
Films	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [3]			ISO 527-3/500
MD : Yield, 100 µm	11.5	MPa	
TD : Yield, 100 µm	11.0	MPa	
MD : Break, 100 µm	20.5	MPa	
TD : Break, 100 µm	19.8	MPa	
Tensile Elongation [4]			ISO 527-3/500
MD : Yield, 100 µm	23	%	
TD : Yield, 100 µm	22	%	
MD : Break, 100 µm	580	%	
TD : Break, 100 µm	430	%	
Trouser Tear [5]			ASTM D1938
MD : 50.0 µm	46.0	kN/m	
TD : 50.0 µm	31.0	kN/m	
Elmendorf Tear Strength [6]			ASTM D1922

MD : 100.0 µm	210.0	kN/m	
TD : 100.0 µm	200.0	kN/m	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity [7] (0.100 mm)	5.1E+3	ohms	Internal Method
Extrusion	Nominal Value	Unit	
Drying Temperature	60.0	°C	
Drying Time	2.0 to 4.0	hr	
Cylinder Zone 1 Temp.	180 to 200	°C	
Cylinder Zone 2 Temp.	180 to 200	°C	
Cylinder Zone 3 Temp.	180 to 200	°C	
Cylinder Zone 4 Temp.	180 to 200	°C	
Cylinder Zone 5 Temp.	180 to 200	°C	
Melt Temperature	< 230	°C	
Die Temperature	200	°C	
NOTE			
1.	CTM E023		
2.	CTM E005		
3.	CTM E041		
4.	CTM E041		
5.	CTM E048, 250 mm/min		
6.	CTM E048B		
7.	CTM E042B		

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

WECHAT