Borstar® ME6052

Medium Density Polyethylene

Borealis AG

Message:

Borstar ME6052 is a black bimodal polyethylene jacketing compound, based on a medium density base resin, which is produced with the Borealis proprietary Borstar bimodal process technology.
Borstar technology allows the manufacturing of polymers outside the traditional MFR and density range making it possible to optimize processability, reduce shrinkage and yet provide excellent physical toughness and environmental stress crack resistance (ESCR).
Borstar ME6052 contains 2.5% well-dispersed carbon black in order to ensure excellent weathering resistance.
Borstar ME6052 offers a balance of properties giving advantages in manufacturing, installation and lifetime performance of communication and energy cables.
Borstar ME6052 meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:
ASTM D 1248 Type II, Class C, Category 4, Grade E8, E9, J4
BS 6234: Type H03C, TS2
DIN 57818/VDE 0818
EN 50290-2-24
HD 620 S1, Part 1, table 4B, DMP 2, 9, 10, 12, 14, 15
IEC 60502, Type ST3
IEC 60502, Type ST7
IEC 60708
IEC 60840, Type ST3
IEC 60840, Type ST7
ISO 1872-PE, KCHL, 33 D-006
NF C32-060

General Information	
Additive	Carbon black (3%)
Features	Moisture resistance
	High ESCR (Stress Cracking Resistance)
	Good UV resistance
	Workability, good
	Good wear resistance
	Scratch resistance
	Good weather resistance
	Good toughness
	Low shrinkage
	High hardness
Uses	Communication Cable Jacketing
	Cable sheath
	Cable sheath
	Wire and cable applications
Agency Ratings	ASTM D 1248, II, Class C, Cat. 4 Grade E8, E9, J4
	BS 6234 Type H03 C TS2
	EN 50290-2-24

HD 620 S1 Part 1, table 4B, DMP 2, 9, 10, 12, 14, 15

IEC 60502 Type ST7

IEC 60502 Type ST3

IEC 60708

IEC 60840 Type ST3 , Type ST7

NF C 32-060

Appearance	Black		
Forms	Particles		
Processing Method	Extrusion		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density			ISO 1183
-- [1]	0.936	g/cm³	ISO 1183
-- [2]	0.948	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR)			ISO 1133
190°C/2.16 kg	0.70	g/10 min	ISO 1133
190°C/5.0 kg	3.0	g/10 min	ISO 1133
Environmental Stress-Cracking Resistance [3] (Condition B, 50°C, 10% Igepal, F0)	> 5000	hr	IEC 60811-4-1/B
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D, 1 sec)	54		ISO 868
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (Yield)	30.0	MPa	ISO 527-2/50
Tensile Strain (Break)	800	%	ISO 527-2/50
Flexural Modulus	700	MPa	ASTM D790
Thermal	**Nominal Value**	**Unit**	**Test Method**
Brittleness Temperature	< -76.0	°C	ASTM D746
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity [4]	1.0E+16	ohms·cm	IEC 60093
Dielectric Strength	20	kV/mm	IEC 60243-1
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Pressure Test [5] (115°C)		%	IEC 60811-3-1
Extrusion	**Nominal Value**	**Unit**	
Drying Temperature	90.0	°C	
Melt Temperature	185 - 190	°C	
Extrusion instructions			
Preheating: 90 °CCooling water: 60 °C			
NOTE			
1.	Base Resin, ISO 1872-2		
2.	Compound, ISO 1872-2		
3.	No crack		
4.	Compound		

5.	at high temperature, 6 hrs

Recommended distributors for this material

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