

POLYOLEFINS

Borstar[®] HE6062

Black Bimodal HD Polyethylene Compound for Jacketing of Communication and Power Cables

DESCRIPTION

Borstar HE6062 is a black, bimodal, high-density polyethylene compound.

It is characterised by its tailor-made properties important in jacketing applications i.e. low shrink back, excellent stress crack resistance and wide processing window.

APPLICATIONS

Borstar HE6062 is intended for jacketing of communication and power cables. If very low shrink back is required, **Borstar HE6067** is recommended. A separate data sheet is issued for this grade.

SPECIFICATIONS

Borstar HE6062 meets the applicable requirements as below when processed using sound extrusion practice and testing procedure:

- ASTM D 1248 Type III, Class C, Category 4, Grade J4, E8, E9, W8, 9
- BS 6234: Type 03C, TS2
- DIN VDE 0207 Type 2YM3
- DIN 57 818/VDE 0818
- HD 620 S1, Part 1, table 4B, DMP 2, 8-12, 14-15
- EN 50290-2-24
- ICEA S-70-547
- IEC 60502, Type ST₇
- IEC 60708
- IEC 60804, ST₇
- ISO 1872-PEKCHL, 40 D-006
- LP 390 C, Type 3, Class H, Grade 1 and 2, Category 4
- NF C 32-060

PHYSICAL PROPERTIES

		Typical Value*	Unit	Test Method
Density, Base Resin		942	kg/m ³	ISO 1872-2B/ISO 1183-D
Density, Compound		954	kg/m ³	ISO 1872-2B/ISO 1183-D
Melt Flow Rate	(190°C/2.16 kg)	0.5	g/10 min	ISO 1133
Melt Flow Rate	(190°C/5.0 kg)	2.0	g/10 min	ISO 1133
Tensile Strength	(50 mm/min)	>25	MPa	ISO 527
Elongation	(50 mm/min)	>700	%	ISO 527
ESCR (50°C, 10% Igepal), (no crack)		>2000	h	IEC 60811-4-1/B
Durometer Hardness	(1 sec)	61	Shore D	ISO 868
Durometer Hardness	(3 sec)	58	Shore D	DIN 53 505
Pressure Test at High Temperature	(115°C, 6 h)	<10	%	IEC 60811-3-1
Brittleness Temperature		<-76	°C	ASTM D 746
Flexural Modulus		850	MPa	ASTM D 790

* Data should not be used for specification work

ELECTRICAL PROPERTIES

	Typical Value*	Unit	Test Method
DC Volume Resistivity	10 ¹⁶	Ω cm	IEC 60093
Dielectric Strength	22	kV/mm	IEC 60243

* Data should not be used for specification work

PROCESSING GUIDELINES

Borstar HE6062 provides excellent surface finish and high output rates over a broad range of conditions.

For extrusion standard PE-screws are recommended, but also screws designed for PVC can be used with good result.

To minimise shrink back hot cooling water is strongly recommended, minimum 60°C.

Suggested melt temperature is in the range of 190 – 230°C dependent of construction and line speed.

If material preheating is used maximum recommended temperature is 90°C.

DELIVERY

Form: Granules
Package: 25 kg bags - 1.375 ton loads
1 - 1.2 ton Jumbo bag

SAFETY

Borstar HE6062 is not classified as a dangerous preparation.

The products are supplied in form of free-flowing granules of approximately 3 - 4 mm sizes and can be readily handled with commercially available equipment. Handling and transport of the products may generate some dust and fines, which constitute a potential hazard for dust explosion. All metal parts in the system should therefore be properly grounded. Properly designed equipment and good housekeeping will reduce the risk. Check and follow local codes and regulations!

Inhalation of any type of dust should be avoided as it may cause irritation of the respiratory system.

The products are intended for industrial use only. A Safety Data Sheet is available on request. Please contact your Borouge representative for more details on various aspects of safety, recovery and disposal of the product.