

BLS 2222

LOW DENSITY BLACK POLYETHYLENE COMPOUND FOR POWER AND TELECOMMUNICATION CABLES

DESCRIPTION

BLS Polymers Ltd. introduces another sophisticated compound for sheathing of MV, HV, EHV Power Cables and Telecommunication Cables – **BLS 2222** a LDPE and Copolymer modified based Black Sheathing Compound protected against Ultraviolet degradation and thermal degradation. This compound is made from specially selected LDPE resin, UV stabiliser and RoHS compliant that provides a balance of toughness, low shrinkage, high moisture barrier, high abrasion resistance, excellent weathering resistance, excellent chemical resistance, high ESCR.

SPECIFICATION

It meets the requirements of raw material for manufacturing of Cables as per –
 ASTM D 1248 Type II, Class C, Category 4 Grade E5, J3, BS 6234, ISO 1872-PE, EN 50290-2-24,
 IEC 60502, Part2, Type ST3, IEC 60840, ST 3, IEC 60708, DIN VDE 0207 Type 2YM2.

TYPICAL PROPERTIES

PROPERTY	UNIT	TEST METHOD	TYPICAL VALUE
Density	gm / cc	ASTM D 792	0.933
Melt Flow Index (190°C, Load of 2.16 Kg)	gm / 10 min	ASTM D 1238	0.80
Tensile Strength at Break	Kg / cm ²	ASTMD 638	170
Elongation at Break	%	ASTMD 638	700
Thermal Stress Cracking Resistance	hours	ASTM D 2951	>96
O.I.T.	Minutes	ASTMD 3895	>70
ESCR, 10% Igepal, 50°C for 1000 hrs.		ASTM D-1693	No Cracks observed
Moisture Content	%	ASTM D-817	0.02
Dissipation factor tan δ		ASTMD 150	0.0005
Volume Resistivity	ohm-cm	ASTMD 257	>1 X 10 ¹⁵
Di-electric Constant		ASTM D 150	2.35
Dielectric Strength	kV/mm	ASTM D 149	>22
Hardness (1 sec)	Shore D	ASTM D 2240	52±1
Brittleness Temperature, -76°C		ASTM D 746	PASSES
UV Resistance for 1000 hours	hrs	ASTM 154-12A	No cracks or stickiness

*The typical values reported in the above table have been obtained from measurements made on extruded samples or pressed plates.

PROCESSING GUIDELINES

It is advisable to preheat the **BLS 2222** at 80°C for 2-3 hours at the time of use for best results.

BLS 2222 can be processed in standard PE extruder.

Recommended Processing Condition **BLS 2222**:

TECHNICAL DATA SHEET

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As a start-up we suggest set the following temperature profile

Zone 1	Zone 2	Zone 3	Zone 4	Flange	Head	Die
160±10	170±10	180±10	190±10	200±10	200±10	210±10

with minimum draw down ratio between 1:1.2 for pressure tooling.

However, actual temperature profile will depend upon the screw compression ratio, L/D ratio, type of extrusion sleeve or pressure.

PACKING

BLS 2222 is available in 25 Kg Woven Sack Bags with liner, 700 Kg Jumbo Bags with liner.

STORAGE & SELF LIFE

BLS 2222 must be stored in ambient temperature (not exceeding 50°C) in a shaded area in sealed and intact bags to avoid exposure to sunlight and moisture. Long storing may affect the property of the compound and for this reason should be used within 12 months from the compounding date. It is better to measure the moisture and dry the material using dehumidifier dryer before use after long storage.

SAFETY

The product is not classified as a hazardous preparation. Dust and fines from the product carry a risk of dust explosion. All equipment should be properly earthed. Inhalation of dust should be avoided as it may cause irritation of the respiratory system. Small amounts of fumes are generated during processing of the product. Proper ventilation is therefore required.

Please refer to our MSDS for details on various aspects of safety, recovery, disposal and handling of the product.

RECYCLING

The product is suitable for recycling using various methods of shredding and cleaning in-house production waste should be kept clean to facilitate direct recycling.

Disclaimer:

The information contained herein may include typical properties and processing parameters of the grade or its typical performances when used in respective applications. The values given above are based on analysis of representative samples and not the actual product supplied. It is the customer's responsibility to inspect and test our grades in order to satisfy itself as to the suitability of the products for the customer's particular application. The customer is solely responsible for all determinations regarding any use of material or product and any process in its area of interest. BLS assumes no obligation or liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of using any of the information or product given in this document. The information and data presented herein is true and accurate to the best of our knowledge. No warranty and/or guarantee expressed or implied, is made regarding performance or otherwise. This information and data may not be considered as a suggestion to use our products without taking into account existing patents, or legal provisions or regulations, whether national or international. The user of any information and/or data is advised to obtain the latest details from any of the offices of the company or its authorized agents, as the information and/or data is subject to change based on the research and development work undertaken by the company.