

## **BLS POLYMERS LIMITED**

## LINEAR LOW DENSITY POLYETHYLENE FOR SHEATHING & JACKETING OF POWER AND COMMUNICATION CABLES

Grade: BLS 6666

BLS Polymers introduces another sophisticated compound for sheathing & jacketing of Power Cables Grade BLS 6666. This compound is made from specially selected LLDPE resin and carbon black that provides a balance of toughness, low shrinkage, high moisture barrier, high abrasion resistance, excellent weathering resistance, excellent chemical resistance, high ESCR, heat deformation resistance, termite resistance, low friction for easy pulling during installation, easy processibility than conventional compounds. This compound meets the stringent quality requirements for Power and Communication Cables. BLS 6666 meets the specification requirements of ASTM D 1248 Type 1 Class C Category 4 Grade E 4, E 5, J 3, BS 6234 Type 03C, IEC 60502 Type ST 3, IEC 60502 Type ST 7, IEC 60840 type ST3, IEC 60840 Type ST 7.

PROPERTY	UNIT	TEST METHOD	TYPICAL
VALUE			
Density	gm / cc	ASTM D 1505	0.938
Melt Flow Index (190ºC,Load of 2.16 Kg)	gm / 10 min	ASTMD-1238	0.75
Tensile Strength	Kg / mm <sup>2</sup>	ASTMD 638	215
Elongation at Break	%	do	900
Carbon Black Content	%	ASTMD 1603	2.4
Carbon Back Dispersion	BS-27	82 Method 823 A&B	
(a) Rating (b) Uniformity of figure 1 appearance			4 Better than 'A' of
O.I.T.	Minutes GR	TEC SPEC /CUG-01/03 AUG20	40

## **TYPICAL PROPERTIES:**

ESCR	hrs	ASTM D-1693 Condition 'B'	>500
Moisture Content	%	ASTM D-817	0.02%
Brittleness Temperature	°C	ASTM D 746	- 70
Di-electric Strength (KV RMS Per MM)	KV/mm	ASTMD 149	24
Oven Ageing at 100°C/ 2 days Retention of Tensile Strength Kg / mm <sup>2</sup> Retention of Elongation at Break %		ASTM D 638 ASTM D 638	>85% >85%

## **Recommended Processing Condition:**

We recommend that material is pre-dried at  $80^{\circ}$  C for 4 hours for best performance.

As a start up, we recommend the following temperature profile

170/185/190/205/220//230/230/240/240 ° C with minimum draw down ratio between 1:1.2 for pressure tooling. For tube tooling draw down ratio between 2 to 8 is recommended.

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

(The information contained in this leaflet is to the best of our knowledge true and accurate, but any recommendation or suggestion which may be made is without guarantee, since the conditions of use are beyond our control. We expressly disclaim liability incurred in connection with the use of these data or suggestions).