



BLS POLYMERS LIMITED

HIGH DENSITY POLYETHYLENE ANTI TRACKING COMPOUND FOR OPTICAL FIBRE CABLES

Grade : BLS ATC 1009

BLS Polymers Ltd. introduces another sophisticated compound for jacketing of Optical Fibre Cables specially for ADSS Cables– BLS ATC 1009 an Anti tracking Compound. This compound is specially formulated from a special HDPE resin, filled with fillers to provide the track resistance and carbon black that provides a balance of toughness, very good resistance to tracking, low shrinkage, high moisture barrier, excellent weathering resistance, excellent chemical resistance, high ESCR, easy processability than conventional compounds. This compound meets the stringent quality requirements for jacketing of optical fibre cables installed in high voltage power transmission lines and resist the effects of high electric fields, specially the degrading effect of random arcing on the cable surface and where high frequency of thunder occurs. This jacketing compound allows for installation under extreme temperature variation conditions and different climatic situations and it provides resistance to strong electro corrosion resistance.

TYPICAL PROPERTIES:

PROPERTY VALUE	UNIT	TEST METHOD	TYPICAL
Density	gm / cc	ASTM D 792	1.17
Melt Flow Index (190°C, Load of 21.16 Kg)	gm / 10 min	ASTM D 1238	90
Tensile Strength	Kg / mm ²	ASTMD 638	140
Elongation at Break	%	ASTMD 638	400
O.I.T.	Minutes	ASTMD 3895	>70
ESCR, 10% Igepal, observed 50° C for 1000 hrs.		ASTM D-1693	No Cracks
Moisture Content	%	ASTM D-817	0.02

Dissipation factor tan d		ASTMD 150	0.0005
Volume Resistivity	ohm-cm	ASTMD 257	1 X 10 ¹⁵
Dielectric Strength	Kv/mm	ASTM D 149	27
Time to track	Minutes	ASTM D 2303	200
Initial voltage	Volt	ASTM D 2303	> 2000
Brittleness Temperature,	°C	ASTM D 746	< -76

Recommended Processing Condition:

We recommend that material is pre-dried at 50° C for 4 hours for best performance.

As a startup, we suggest set the following temperature profile

110/115/120/125/130//135/140/140/145 ° 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).

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