



**Black HDPE Sheathing / Jacketing Compound :**

**KI – BS - 0366**

**DESCRIPTION :**

KI-BS-0366 is black High density polyethylene (HDPE) sheathing / jacketing compound is well suited for communication, control and power cables.

KI-BS-0366 has excellent stress crack resistance and tensile properties. It contains 2.5% well dispersed carbon black to ensure excellent resistance to outdoor weathering.

**SPECIFICATIONS :**

KI-BS-0366 conforms: ST-7 of IEC-60502 / 60840. DMP 2/ DMP 9/ DMP 13 - HD 620 S2:2010

| Properties  | Unit                 | Typical Value       | Test Method   |
|---|----------------------|---------------------|---------------|
| Density of Compound   | gm / cm <sup>3</sup> | 0.955               | ASTM D-792    |
| Melt flow index @ 190°C / 2.16 kg_load                          | gm / 10 min          | 0.40 – 0.60         | ASTM D-1238   |
| Oxidation Induction Time  | Minutes              | > 100               | ASTM-D-3895   |
| Carbon Black Content  | %                    | 2.5                 | ASTM-D-1603   |
| Tensile Strength at break                                       | MPa                  | > 20.0              | ASTM-D-638    |
| Elongation at Break   | %                    | > 800               | ASTM-D-638    |
| Oven ageing at 110 °C, 14 Days<br>Variation in Tensile Strength | %                    | ± 20                | IEC 60811-2-1 |
| Variation in Elongation at Break                                | %                    | ± 20                | IEC 60811-2-1 |
| Brittleness temperature   | °C                   | <-76°C              | ASTM D746     |
| Volume Resistivity@25°C   | Ohm-cm               | >1x10 <sup>15</sup> | ASTM-D-257    |
| Electric Strength   | kV/mm                | 60                  | IEC 60243-1   |
| Pressure Test (@115°C,6hr)                                      | %                    | <10%                | IEC 60811-3-1 |
| ESCR @ 50°C (No failure)  | Hrs.                 | > 1000              | ASTM-D-1693   |
| Hardness  | Shore D              | 59 - 60             | ASTM-D-2240   |
| Extrusion Melt Temperature                                      | °C                   | 180°C to 190°C      | -             |

All properties have been determined from compression moulded plaque after 24 hours conditioning.

**PRE DRYING :** Dehumidified hopper drying at 70°C for 1 to 2 hours prior to extrusion may be used to remove moisture. Specific processing conditions depends on type / size of the extruder and cable dimension and output.



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## PROCESSING CONDITIONS :

| Position | Temperature (°C) |
|----------|------------------|
| Barrel   | 180 - 200        |
| Head     | 200 - 220        |
| Die      | 230              |

**PACKAGE** : 25 kgs packed woven sack bags containing inner PE liners, Other packing to customers specific requirements are also available.

**STORAGE** : Storage should be in cool & proper place. Bags should be kept top of  
of  
Wooden or plastic pallets.

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*The information given in the document is believed to be reliable and is given in the good faith but without warranty. The user should test the product to ascertain the suitability for the intended use. Product specification or the whole document is subject to change without any prior notice.*

**MKT: TDS – BS/0366 – 03/14**