



# Ddev Plastiks Industries Limited

An ISO 9001:2015 company

## TECHNICAL DATA

**Natural LLDPE Sheathing Compound:**

**KI –SC – 0699**

### DESCRIPTION :

KI-SC-0699 is a high molecular weight, Linear low density Polyethylene based Sheathing compound. KI-SC-0699 has excellent stress crack resistance and tensile properties. It contains UV additive to ensure excellent resistance to outdoor weathering.

### APPLICATION:

KI-SC-0699 is designed for sheathing of energy and communication cables. It has good abrasion resistant and low coefficient of friction property to make it suitable for sheathing of energy and communication cables. The balance properties of KI-SC-0699 gives advantage in manufacturing, installation and lifetime performance of communication and energy cables.

### SPECIFICATIONS :

KI-SC-0699 conforms to ST-3 & ST-7 of IEC-60502/60840, ASTM D1248 Type-1, Class A, Category 4, GradeE4, E5, J3.

### TYPICAL PROPERTIES:

| Properties  | Unit                 | Typical Value | Test Method                        |
|---|----------------------|---------------|------------------------------------|
| Colour  | -                    | Natural       | Visual                             |
| Density   | gm / cm <sup>3</sup> | 0.923         | ASTM D-792                         |
| Melt flow index @ 190°C / 2.16 kg_load  | gm / 10 min          | 0.70-0.85     | ASTM D-1238                        |
| Oxidation Induction Time  | Minutes              | >100          | ASTM-D-3895                        |
| Tensile Strength at break (50mm/min)  | MPa                  | >20           | ASTM-D-638                         |
| Elongation at Break (50mm/min)  | %                    | >800          | ASTM-D-638                         |
| ESCR @ 50°C Igepol 10% (No failure)   | Hrs.                 | > 500         | ASTM-D-1693                        |
| Hardness  | Shore D              | 49-50         | ASTM-D-2240                        |
| Di-electric Strength  | KV/mm                | > 20          | ASTM-D-149                         |
| Di-Electric Constant @25°C  | -                    | 2.3           | ASTM-D-150                         |
| Dissipation Factor @25°C  | -                    | 0.00015       | ASTM-D-150                         |
| Brittleness Temperature   | °C                   | < -76         | ASTM D746                          |
| Oven ageing at 100°C,240 hours<br>a) Variation in Tensile Strength<br>b) Variation in Elongation at Break | %<br>%               | ±20<br>±20    | IS-10810 Part-11/<br>IEC 60811-401 |

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

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**PROCESSING CONDITIONS :**

If preheating or drying is used, the maximum temperature should be 90°C.

| <b>Position</b> | <b>Temperature (°C)</b> |
|-----------------|-------------------------|
| Barrel          | 160 - 180               |
| Head            | 180 - 200               |
| Die             | 200 - 220               |

**PACKAGE :**

25 kg packed woven sack bags containing inner PE liners, 600 kg. paper carton with PE liner & other packing to customers. Specific requirements are also available.

**STORAGE :**

Storage should be in cool & proper place. Bags should be kept top 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.*

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