

Conductor Shield

Density 1.13



Description

PRAMKOR 1016-TR is a specially formulated crosslinkable semi-conductive polyethylene copolymer compound for conductor and bonded insulation shielding of medium and high voltage XLPE insulated power cable.

PRAMKOR 1016-TR is suitable for both tandem and triple common head extrusion processes in steam or dry continuous curing system.

Especially, PRAMKOR 1016-TR has excellent tree retardant properties.

Characteristics

- Excellent Surface Smoothness
- Excellent Electrical Properties
- Excellent Physical and Thermal Properties
- Long-run Extrusion without Scorch
- Compatibility with Bare Conductors
- Excellent Tree Retardance

Specifications

Cables with conductor shielding of PRAMKOR 1016-TR, prepared applying sound commercial manufacturing and test procedure, meet the following industrial cable specifications.

- AEIC CS 8-00
- ICEA S-93-639/NEMA WC 74
- IEC 60502
- UL 1072

Electrical Properties

Property	Test Method	Unit	Value
DC Volume Resistivity	ASTM D 991		
at 23°C		$\Omega \cdot \text{cm}$	< 100
at 90°C		$\Omega \cdot \text{cm}$	< 500
at 135°C		$\Omega \cdot \text{cm}$	< 1,000

Physical Properties

Property	Test Method	Unit	Value
Density at 23°C	ASTM D 1505	g / cm ³	1.13
Ultimate Tensile Strength	ASTM D 638	N/mm ²	18.0
Elongation at Break	ASTM D 638	%	200
Air Oven Aging, 121°C ×168hrs	ASTM D 638		
Retention of Tensile Strength		%	> 90
Retention of Elongation		%	> 90
Brittleness Temperature	ASTM D 746	°C	< -50
Heat Deformation, 121°C ×2 kg	JIS C 3005	%	< 18
Moisture Content	Karl Fischer	ppm	< 500
Metal Ion Contents	ICP	ppm	< 500

(1) Tests are conducted on compression molded slabs cured 15 minutes at 180°C.

(2) Data and/or informations are for guidance only ; should not be used for specification work.

Processing Techniques

PRAMKOR 1016-TR provides excellent surface finish and outstanding output rates over a broad range of extrusion conditions.

PRAMKOR 1016-TR requires melt stock temperatures in the range of 100°C to 125°C for best results.

Dehumidified hopper drying at 60~70°C for upto 4 hours prior to extrusion might be employed to remove moisture.

Specific processing conditions depend on equipments and cable dimensions.

Optimum conditions by conventional practices should be established.

Extrusion Conditions

Extrusion Zone	C1	C2	C3	C4	C5	Neck	Head
Temperature(°C)	90	105	110	110	113	115	115

* Screw Cooling Temperature:80°C

Packing

PRAMKOR 1016-TR is in pellet form and packed in 600kg polybag lined carton box ensuring to prevent the uptake of moisture and contaminants.

Custom packaging is available.