SHAKUN POLYMERS PRIVATE LIMITED

HTP-HDS (TR)

BLACK HIGH DENSITY POLYETHYLENE TRACK RESISTANT COMPOUND FOR OPTICAL FIBRE CABLES

Description

HTP-HDS (TR) is based on High Density Polyethylene and has a specially designed additive package to give excellent track resistance. It is also well protected against UV degradation in order to ensure outstanding weathering resistance.

Application

HTP-HDS (TR) is developed for jacketing Fibre Optical Cables designed for installation in high voltage power Transmission lines.

The compound may also be used for other applications where thermoplastic track resistant materials can be applied.

HTP-HDS (TR) can resist severe installation and service conditions even at elevated temperatures.
HTP-HDS (TR) is characterized by excellent
- Mechanical properties
- ESCR
- Heat deformation resistance
- Track resistance

Typical Properties of Compound

Physical Properties	*Test Method*	*Unit*	*Typical Value*
Melt Index	ASTM D 1238	g/10 min	< 0.4
Density at 27° C	ASTM D 1505	g/cm^3	0.945
Tensile Strength	ASTM D 638	kg/cm^2	220
Elongation at break	ASTM D 638	%	700
ESCR (10%IGEPAL) Fo	ASTM 1693	h	>1000
OIT at 200^{0}C	ASTM D 3895	min	>60
Carbon black content	ASTM D 1603	%	1.08
Carbon Black Dispersion	BS 2782	--	Uniform
Moisture content	SPL	%	<0.01
Electrical Properties			
Dielectric Constant	ASTM D 150	--	2.35
Dissipation Factor	ASTM D 150	--	0.0004
Dielectric Strength	ASTM D 149	kV/mm	>20
Volume Resistivity	ASTM D 257	ohm-cm	8×10^{16}

Data should not be used for specification work

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Processing Temperature

HTP-HDS (TR) can be processed at temperatures starting from 140°C on Extruder Barrel Zone 1 to 230°C on Die.

Packaging

HTP-HDS (TR) is available in the form of free flowing granules and supplied in Raffia Bags with a net content of 25 Kgs.

Storage & shelf life

The product/compound should remain in

- Sealed condition
- Without exposing to direct sunlight and temperature not exceeding 45°C

Shelf life of the compound is 12 months from the date of manufacture.
Product alteration may occur due to extended period of storage.
Shakun accepts no liability of any kind in case the above mentioned storage conditions are not fulfilled.

Safety

HTP-HDS (TR) is not classified as a dangerous preparation.
The product is supplied in form of pellets of about 2 – 3 mm in size and can be readily handled with commercially available equipment. All handling and transport of the product may generate some dust and fines, which constitute a potential risk for dust explosion. Therefore, all instruments in the system should be properly grounded. Properly designed equipment and good storage will reduce the potential risk. Please, check and follow local disposal regulations!

Inhalation of any type of dust may irritate the air passages and should be avoided. For hot products: immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat.

In case of adverse exposure to melting products formed at elevated temperatures, immediately remove, the affected victim from exposure.

Sweep up spilled granules and place in suitable containers for recycle or disposal. Consult an expert on disposal or recovered material and ensure conformity to local disposal regulations.

The product is intended for industrial use only. A Material Safety Datasheet is available on request. Please contact our Technical Team at SHAKUN POLYMERS PRIVATE LTD., for more details on various aspects of safety, recovery and disposal of the product.

This information is to the best of our knowledge accurate but all recommendations or suggestions are made without guarantee or legal liabilities since the conditions of use are beyond our control. The typical values given do not constitute specification for the product but represent typical analytical values.