



46GP009UV

HIGH DENSITY POLYETHYLENE RESIN FOR TELECOM DUCTS

46GP009UV is a natural HDPE extrusion grade & possesses bimodal molecular weight distribution which improves process ability and mechanical properties of pipes & ducts.

46GP009UV is UV stabilized grade & is suitable for producing Telecom ducts to be used as Underground Optical fiber cable & conduits and for other general-purpose application. The grade is designed to sustain outdoor exposure of 12 months. 46GP009UV conforms to TEC generic requirements No. GR/TX/CDS- 008/03/MAR – 2011 & GR/DWC-34/01 SEP 2007.

Typical Characteristics*			
Property	Test Method	Unit	Typical Value**
Melt Flow Index (190°C/5.0 Kg)	ASTM D1238	gm/10 min	0.9
Density (23°C)	ASTM D1505	gm/cm ³	0.948
OIT (Al pan, 200 °C)	ASTM D3895	min	>30
Tensile Strength at Yield	ASTM D638	MPa	24.0
Elongation at Yield	ASTM D638	%	11
Elongation at Break	ASTM D638	%	>600
Flexural Modulus @ 1% Strain	ASTM D790	MPa	750
Hardness	ASTM D2240	Shore D	63
Heat Deflection Temperature at 45g/mm ²	ASTM D648	°C	72
ESCR @ 10 % Igepal Soln (F ₅₀)	ASTM D1693	Hrs	>1000

* Typical values not to be taken as specification

**Mechanical Properties are on Compression Moulding

Applications

Ducts for optical fibre cables & General-purpose applications

Typical Process Conditions:

- Typical Process Temp (°C) - 180 – 220

Regulatory Information

- Meets the requirements stipulated in standard IS: 10146:1982 on "Specification for Polyethylene for safe use in contact with foodstuffs, pharmaceuticals, and drinking water". It also conforms to IS 16738:2018 "Positive List of Constituents for Polypropylene, Polyethylene and their Copolymers for its Safe Use in Contact with Foodstuffs and Pharmaceuticals"
- The grade and the additives incorporated in it also comply with the FDA: CFR Title 21,177.1520, Olefin polymers.

Storage Recommendations

- Bags should be stored in dry/closed conditions at temperatures below 50°C and protected from UV / direct sunlight.

Reliance Industries Limited