



45GP004Y Yellow Medium Density Polyethylene Compound FOR GAS PIPES

Relene 45GP004Y is Yellow coloured Medium Density PE 80 (MRS > 8 Mpa) material for gas pipe extrusion. It possesses bimodal molecular weight distribution, which improves processability.

This grade meets the MFI, Density & Hydrostatic strength requirements of material grade PE 80 as per IS: I 4885:2001.

The grade has been certified for MRS > 8 MPa as per ISO 9080. The pipes made of Relene 45GP004Y has completed 10000 hrs test at 20°C as per clause 5.6 of IS I 4885:2001

Property	Test Method	Unit	Remarks
Hydrostatic Pressure Test	IS I 4885	Hrs	
9 MPa @ 20°C		–	> 100
4.6 MPa @ 80°C		–	> 165
4.0 MPa @ 80°C		–	> 1000
Hydrostatic Pressure Test – Notched Pipes		–	> 500
4.0 MPa @ 80°C			

Typical Characteristics*			
Property	Test Method	Unit	Typical Value**
Melt Flow Index (190°C/5.0 Kg)	IS 2530	gm/10 min	0.45
Density (23°C)	IS 7329	gm/cm ³	0.940
Pigment Dispersion	IS I 4885	Grade	< 3
Resistance to Gas Constituents	IS I 4885	Hrs	> 26
Thermal Stability 200°C	IS I 4885	Minutes	> 30
Tensile Strength at Yield	IS 2530	MPa	25
Elongation at Break	IS 2530	%	> 600
ESCR, F ₅₀	ASTM D1693	Hrs	> 1000

*Typical values not to be taken as specification

**Mechanical Properties are on Compression molded specimen

Applications

PE 80 Gas pipes

Storage Recommendations

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