



45GP004Y

Yellow Medium Density Polyethylene Compound

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: 14885:2001.

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 14885:2001

Property	Test Method	Unit	Remarks
Hydrostatic Pressure Test	IS 14885	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/cm³	0.940	
Pigment Dispersion	IS 14885	Grade	< 3	
Resistance to Gas Constituents	IS 14885	Hrs	> 26	
Thermal Stability 200°C	IS 14885	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

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.

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^{**}Mechanical Properties are on Compression molded specimen

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