

PI500

Introduction

YUCLAIR PI500, middle density linear polyethylene, is an ethylene-butene copolymer with broad molecular weight distribution. It offers a high degree of cold temperature impact resistance, stress crack resistance and toughness combined with good processability.

Application / Use Case:

- Pipe, Pipe coating

Properties

		Nominal Value (English)	Nominal Value (SI)	Test Method
Resin Properties	Density	0.941 g/cm ³	0.941 g/cm ³	ASTM D1505
	Melt index (2.16 kg @190°C)	0.33 g/10min	0.33 g/10min	ASTM D1238
Mechanical Properties¹	Tensile strength at yield	2700 psi	18.6 MPa	ASTM D638 ²
	Tensile strength at break	3980 psi	27.5 MPa	ASTM D638 ²
	Elongation at break	900 %	900 %	ASTM D638 ²
	Izod impact strength (Notched, 23 °C)	N.B	N.B	ASTM D256
	Hardness (Shore D)	60	60	ASTM D2240
	Flexural modulus	98,140 psi	680 MPa	ASTM D790
	ESCR	> 1000 hr	> 1000 hr	ASTM D1693
Thermal Properties	Vicat softening temperature	246 °F	119 °C	ASTM D1525
	Melting temperature	257 °F	125 °C	ASTM D2117

¹ Evaluated using Injection molded sample

² Crosshead speed: 50 mm/min

Notes

These are **typical values** and are **not be construed as specifications**. The physical properties are highly dependent on the manufacturing conditions. So customers should confirm performances by their own tests.

