

RG500U

Introduction

YUCLAIR RG500U, medium density linear polyethylene, is an ethylene-butene copolymer with narrow molecular weight distribution. It offers a high impact resistance and stress crack resistance and toughness combined with good processability. RG500U contains UV-stabilizer, for use in products requiring out-door weathering resistance.

Application / Use Case:

- Roto molding / Container

Properties

		Nominal Value (English)	Nominal Value (SI)	Test Method
Resin Properties	Density	0.938 g/cm ³	0.938 g/cm ³	ASTM D1505
	Melt index (2.16 kg @190°C)	5.0 g/10min	5.0 g/10min	ASTM D1238
Mechanical Properties¹	Tensile strength at break	3560 psi	24.5 MPa	ASTM D638 ²
	Elongation at break	700 %	700 %	ASTM D638 ²
	Izod impact strength (Notched, 23 °C)	N.B	N.B	ASTM D256
	Hardness(Shore D)	55	55	ASTM D2240
	Flexural modulus	71,120 psi	490 MPa	ASTM D790
	ESCR	>1000hr	>1000hr	ASTM D1693
Thermal Properties	Vicat softening temperature	243 °F	117 °C	ASTM D1525
	Brittleness temperature	< -112 °F	< -80 °C	ASTM D746

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.

