

RG300U

Introduction

YUCLAIR RG300U, medium density linear polyethylene, is an ethylene-butene copolymer with narrow molecular weight distribution. It offers a high impact resistance, stress crack resistance and toughness combined with good processability. RG300U 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	0.930 g/cm ³	0.930 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 yield	2060 psi	14.2 MPa	ASTM D638 ²
	Tensile strength at break	3560 psi	24.5 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)	50	50	ASTM D2240
	ESCR	>1000hr	>1000hr	ASTM D1693
Thermal Properties	Vicat softening temperature	225 °F	107 °C	ASTM D1525
	Melting temperature	250 °F	121 °C	ASTM D2117
	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.

