

MB509U

Introduction

YUCLAIR MB509U, medium 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. MB509U contains UV-stabilizer, for use in products requiring out-door weathering resistance.

Application / Use Case:

- Pipe Coating

Properties

		Nominal Value (English)	Nominal Value (SI)	Test Method
Resin Properties	Density	0.939 g/cm ³	0.939 g/cm ³	ASTM D792
	Melt index (2.16 kg @190°C)	0.35 g/10min	0.35 g/10min	ASTM D1238
Mechanical Properties¹	Tensile strength at yield	2420 psi	16.7 MPa	ASTM D638 ²
	Tensile strength at break	3980 psi	27.5 MPa	ASTM D638 ²
	Elongation at break	900 %	900 %	ASTM D638 ²
	Flexural modulus	96,720 psi	670 MPa	ASTM D790
	Hardness(Shore D)	58	58	ASTM D2240
Thermal Properties	Vicat softening temperature	244 °F	118 °C	ASTM D1525
	Melting temperature	255 °F	124 °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.

