

LLDPE**LLDPE C4LL 20024****LINEAR LOW DENSITY POLYETHYLENE (LLDPE)**

This is an ethylene 1-butene copolymer resin series. This medium-flow LLDPE grade offers excellent stiffness, heat distortion resistance, and good environmental stress-crack resistance. The excellent toughness and ESCR make this grade an effective blend partner for HDPE, where it can enhance the environmental stress-crack resistance of items such as buckets and lids.

Typical Application	Product Characteristics	International Compliance
• Bottle caps • Compounding (powder form) • Containers • Door mats • Dust bins • Large part housewares • Lids	• Excellent stiffness • Good heat distortion resistance • Good environmental stress-crack resistance • Excellent toughness • Effective blend partner for HDPE to enhance ESCR	• Food-contact compliance (e.g. FDA, EU) documented at the producer level; contact for application-specific compliance letter

Physical Properties

Properties	Test Method	Typical Value	Unit
Density	ASTM D1505	0.924	g/cm ³
Melt Index (190°C/2.16kg)	Internal Method	20	g/10 min
Peak Melting Temperature	Internal Method	122	°C
Vicat Softening Temperature	ISO 306	94	°C
Tensile Stress at Yield	ISO 527-2/1A/50	10	MPa
Tensile Strain at Yield	ISO 527-2/1A/50	20	%
Tensile Strain at Break	ISO 527-2/1A/50	>100	%
Flexural Modulus	ISO 178	260	MPa
Environmental Stress-Crack Resistance (50°C, 10% Igepal)	ASTM D1693	20	h
Notched Izod Impact Strength	ISO 180/1A	47	kJ/m ²

Processing Guidelines

Molded properties were measured on 2 mm thick compression-molded plaques prepared per ASTM D4703 Procedure C (15°C/min); ESCR specimens were 3 mm plaques with notch condition A.

The nominal properties reported herein are typical of the product and do not reflect normal testing variance; they should not be used for specification purposes.