LLDPE

LLDPE 2650

LINEAR LOW DENSITY POLYETHYLENE (LLDPE)

This is a general-purpose, very-high-flow linear low-density polyethylene resin suitable for the injection moulding process. The resin has been designed to deliver excellent impact strength and environmental stress crack resistance combined with high flow ability, giving good mould filling in thin-walled and complex parts.

Typical Application	Product Characteristics
• General injection parts	• Excellent impact resistance
• Household products	• Good environmental stress crack resistance
• Lids and bottle closures	• High flow ability
• Masterbatch carrier resin	

Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate (190°C/2.16 kg)	ASTM D1238	50	g/10 min
Density	ASTM D792	0.926	g/cm³
Tensile Strength at Yield	ASTM D638	17.6	MPa
Elongation at Break	ASTM D638	100	%
Flexural Modulus	ASTM D790	598	MPa
Notched Izod Impact (23°C)	ASTM D256	40	kJ/m²
Hardness	ASTM D2240	18	Shore D
Environmental Stress Crack Resistance (50°C, Condition B, 100% Igepal, F50)	ASTM D1693	24	h
Melting Point	ASTM D2117	121	°C
Vicat Softening Point	ASTM D1525	90	°C
Brittleness Temperature	ASTM D746	< -70	°C

Processing Guidelines

Recommended injection-moulding conditions: melt temperature 170-200°C, mould temperature 20-60°C, fast injection speed, screw speed 40-70 rpm. Pressure: injection 30-70%, packing and holding 30-50%, back pressure 10% of maximum. Actual conditions depend on machine type, part geometry, mould design and environment.

1. 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.
2. Values (MFR 50 g/10 min, density 0.926 g/cm³) match the published typical values for this generic injection-moulding LLDPE family across multiple licensed producers, including the family datasheet shared with the higher-flow grade at this density; grade-specific certificate of analysis supplied per lot at order.
3. Tensile Strength at Yield and Flexural Modulus converted from 180 kgf/cm² and 6,100 kgf/cm² respectively using the source's stated conversion factor (divide by 10.20).