

Technical Data Sheet

Icorene POLYETHYLENE LP 551-01 NATURAL



Polyethylene, High Density Copolymer

Product Description

LP 551-01 is a narrow molecular weight copolymer, high-density polyethylene combining excellent impact strength with good environmental stress crack resistance. This resin meets FDA Regulation 21 CFR 177.1520, 3.1 and 3.2. Applications include pails, housewares, heavy-duty crates, and industrial components.

Processing Method	Compounding; Injection Molding
Attribute	Copolymer; Good Impact Resistance; High ESCR (Environmental Stress Cracking Resistance); Narrow Molecular Weight Distribution
Forms	Pellets
Application	Crates; Household Goods; Industrial Applications; Pails

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	7.0	g/10 min	ASTM D1238
Density - Specific Gravity	0.951	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min)	22.1	MPa	ASTM D638
Environmental Stress Crack Resistance, (Condition B, F50)	5.00	hr	ASTM D1693
Flexural Modulus, (1% Secant)	896	MPa	ASTM D790
Tensile Elongation at Break, (51 mm/min)	100	%	ASTM D638
Impact			
Gardner Impact, (-40 °C)	32.5	J	ASTM D3029
Ductile/Brittle Transition Temperature	-68.9	°C	ASTM D746
Notched Izod Impact	53	J/m	ASTM D256
Hardness			
Durometer Hardness, (Shore D)	59		ASTM D2240