

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.

Regulatory Status

For regulatory compliance information, see POLYETHYLENE LP 551-01 NATURAL [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Discontinued
Availability	Asia-Pacific; North America
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

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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