

Technical Data Sheet

Icorene POLYETHYLENE LP 552-01 NATURAL



Polyethylene, High Density Copolymer

Product Description

LP 552-01 is a U.L. approved narrow molecular weight copolymer high-density polyethylene combining good flow with excellent stiffness and cold temperature impact strength. It has good toughness and stress crack resistance. This resin meets FDA regulation CFR 177.1520 (c) 3.1. Applications include food storage containers, housewares, toys, overcaps, and closures. It also meets the requirement of Toyota Specification TSM 5518G-2.

Processing Method	Compounding; Injection Molding
Attribute	Copolymer; Food Contact Acceptable; Good Flow; Good Toughness; High ESCR (Environmental Stress Cracking Resistance); High Stiffness; Low Temperature Impact Resistance; Narrow Molecular Weight Distribution
Forms	Pellets
Application	Caps; Closures; Food Containers; Household Goods; Toys

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	20	g/10 min	ASTM D1238
Density - Specific Gravity	0.951	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield	22.1	MPa	ASTM D638
Environmental Stress Crack Resistance, (Condition B, F50)	1.00	hr	ASTM D1693
Flexural Modulus, (1% Secant)	827	MPa	ASTM D790
Tensile Elongation at Break	100	%	ASTM D638
Impact			
Gardner Impact, (-40 °C)	176	J	ASTM D3056
Ductile/Brittle Transition Temperature	-73.3	°C	ASTM D746