Technical Data Sheet

Icorene POLYETHYLENE LP 554-01 NATURAL

High Density Polyethylene

Product Description

LP 554-01 Natural is a narrow molecular weight homopolymer high-density polyethylene exhibiting toughness, rigidity and warpage resistance. This resin meets FDA Regulation 21 CFR 177.1520 (c) 2.1 and 2.2. Applications include crates, tote bins, cases and trays.

Regulatory Status

For regulatory compliance information, see POLYETHYLENE LP 554-01 NATURAL Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Discontinued
Availability	Asia-Pacific; North America
Processing Method	Compounding; Injection Molding
Attribute	Food Contact Acceptable; Good Toughness; High Rigidity; Homopolymer; Narrow Molecular Weight Distribution; Warp Resistant
Forms	Pellets
Appearance	Natural Color
Application	Containers; Crates; Support Trays

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	8.0	g/10 min	ASTM D1238
Density - Specific Gravity	0.963	g/cm³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min)	29.6	MPa	ASTM D638
Flexural Modulus, (1% Secant)	586	MPa	ASTM D790
Environmental Stress Crack Resistance, (Condition B, F50)	5.00	hr	ASTM D1693
Tensile Elongation at Break, (51 mm/min)	>800	%	ASTM D638
Impact			
Notched Izod Impact	53	J/m	ASTM D256
Hardness			
Durometer Hardness, (Shore D)	65		ASTM D2240
Thermal			
Vicat Softening Temperature	128	°C	ASTM D1525

Manufacturer website: https://www.lyondellbasell.com/en/

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/.

© LyondellBasell Industries Holdings, B.V. 2026

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.