

Technical Data Sheet

Icorene 3940 GRY 7840

High Density Polyethylene



Product Description

Icorene 3940 is a high density polyethylene specifically developed for rotational moulding. This grade is suitable for use in general purpose applications. It has a good balance of properties such as toughness and stiffness.

Processing Method Rotomolding

Attribute Good Processability; Good Stiffness; Good Toughness; UV Resistant

Forms Powder

Appearance Natural Color; Unspecified Color

Additive UV Stabilizer

Application Containers; General Purpose; Tanks

	Nominal		
Typical Properties	Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	4.0	g/10 min	ASTM D1238
Density	0.939	g/cm³	ASTM D1505
Mechanical			
Tensile Strength at Yield, (50 mm/min, 23 °C, 3.20 mm)	19.0	MPa	ISO 527-1
Tensile Strength at Break, (50 mm/min, 23 °C, 3.20 mm)	20.0	MPa	ISO 527-1
Environmental Stress Crack Resistance, (100% Igepal, 50 °C)	>1000	hr	ASTM D1693
Flexural Modulus	730	MPa	ISO 178
Tensile Elongation at Break, (50 mm/min, 23 °C, 3.20 mm)	>280	%	ISO 527-1
Impact			
Drop Impact Resistance, (-20 °C, Internal Method)	170	J/cm	ASTM D4226
Hardness			
Durometer Hardness, (Shore D)	60		ISO 868
Thermal			
Vicat Softening Temperature, (A (10N))	118	°C	ISO 306
Melting Temperature	128	°C	DSC

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. 2018

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.

LyondellBasell Technical Data Sheet Date: 12/6/2024