

## Technical Data Sheet

# Icorene 3940

Linear Medium Density Polyethylene  
LyondellBasell Industries  
Rotomolding

### Product Description

ICORENE® 3940 is a linear medium density polyethylene developed for rotational molding applications.

The resin is fully UV stabilized and suitable for general purpose applications. It has a good balance of properties such as toughness and stiffness.

### General

Additive	• UV Stabilizer		
Features	• Ablation Resistant • General Purpose	• Good Processability • Good Stiffness	• Good Toughness • UV Resistant
Uses	• Containers • General Purpose	• Outdoor Applications • Pallets	• Tanks
Appearance	• Black	• Colors Available	• Natural Color
Forms	• Pellets	• Powder	
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.939 to 0.941 g/cm <sup>3</sup>	0.939 to 0.941 g/cm <sup>3</sup>	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 Kg)	3.4 to 4.0 g/10 min	3.4 to 4.0 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
10% Igepal	50.0 hr	50.0 hr	
100% Igepal	> 1000 hr	> 1000 hr	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength <sup>1</sup> (Yield)	2900 psi	20.0 MPa	ASTM D638
Flexural Modulus <sup>2</sup>	121000 psi	834 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Impact Strength			ARM
-40°F (-40°C), 0.125 In (3.18 Mm), Rotational Molded	57 ft·lb	77 J	
-40°F (-40°C), 0.250 In (6.35 Mm), Rotational Molded	> 190 ft·lb	> 258 J	
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 Psi (0.45 Mpa), Unannealed	144 °F	62.0 °C	
264 Psi (1.8 Mpa), Unannealed	105 °F	40.6 °C	

### Additional Information

Test data for natural, unpigmented resin.

### Notes

<sup>1</sup> 2.0 in/min (50 mm/min)

<sup>2</sup> 0.051 in/min (1.3 mm/min)

### Notes

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