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/cm³	0.939 to 0.941 g/cm³	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 [1] (Yield)	2900 psi	20.0 MPa	ASTM D638
Flexural Modulus [2]	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

[1] 2.0 in/min (50 mm/min)

[2] 0.051 in/min (1.3 mm/min)

Notes

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