

Technical Data Sheet

Icorene XE00018

High Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description

ICORENE® XE00018 is a hexene high density polyethylene specifically developed for use in rotational moulding.

This grade is designed for use in large tanks including agriculture and chemical storage containers and underground & infrastructure applications. ICORENE® XE00018 has good overall mouldability, extremely high stiffness, hardness and impact strength.

It is not intended for use in medical and pharmaceutical applications.

General

Additive	• Antioxidant	• UV Stabilizer	
Features	• Good Moldability • Good Toughness	• High ESCR (Stress Crack Resist.) • High Rigidity	• Low Temperature Impact Resistance • UV Resistant
Uses	• Agricultural Tanks	• Tanks	
Appearance	• Black	• Unspecified Color	
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.952 g/cm ³	0.952 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 Kg)	2.2 g/10 min	2.2 g/10 min	ISO 1133
Environmental Stress-Cracking Resistance (ESCR) 122°F (50°C), 10% Igepal, F50	> 500 hr	> 500 hr	ASTM D1693B
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	160000 psi	1100 MPa	ISO 527-1
Tensile Strength (Yield)	3630 psi	25.0 MPa	ISO 527-1
Tensile Strain			ISO 527-1
Yield	10 %	10 %	
Break	> 200 %	> 200 %	
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	5.0 ft·lb/in ²	11 kJ/m ²	ISO 179
Impact Strength -40°F (-40°C), 0.118 In (3.00 Mm), Rotational Molded	> 55 ft·lb	> 75 J	ARM
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Shore Hardness (Shore D)	70	70	ISO 868

Notes

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