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/cm³	0.952 g/cm³	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)			ASTM D1693B
122°f (50°c), 10% Igepal, F50	> 500 hr	> 500 hr	
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/in²	11 kJ/m²	ISO 179
Impact Strength			ARM
-40°f (-40°c), 0.118 In (3.00 Mm), Rotational Molded	> 55 ft·lb	> 75 J	
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.