Technical Data Sheet

Icorene X1490

Linear Medium Density Polyethylene
LyondellBasell Industries
Rotomolding

Product Description
ICORENE® X1490 is an experimental UV stabilised linear medium density polyethylene colour powder. It has been developed for use as a powder in rotational moulding. Data is provisional. This grade is a very fast processing material which is unusually high in ESCR and cold impact strength. It is suitable for use in many different applications but especially where very fast melting is needed. It is easy to process with a low shrinkage tendency.

General			
Additive	• UV Stabilizer		
Features	• General Purpose • Good Flow • Good Moldability	• Good Processability • Good Stiffness • Good Toughness	• UV Resistant
Uses	• General Purpose		
Appearance	• Unspecified Color		
Forms	• Powder		
Processing Method	• Rotational Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density (73°f (23°c))	0.936 g/cm³	0.936 g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°c/2.16 Kg)	12 g/10 min	12 g/10 min	ISO 1133
Environmental Stress-Cracking Resistance (ESCR)			ASTM D1693
Condition B, 122°f (50°c), 10% Igepal, Rotational Molded, F50	> 500 hr	> 500 hr	
Condition B, 122°f (50°c), 100% Igepal, Rotational Molded, F50	> 1000 hr	> 1000 hr	
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus (73°f (23°c))	102000 psi	700 MPa	ISO 527-1
Tensile Strength (Yield)	2470 psi	17.0 MPa	ISO 527
Tensile Strain (Break, 73°f (23°c))	> 450 %	> 450 %	ISO 527-2
Flexural Modulus (73°f (23°c))	87000 psi	600 MPa	ISO 178
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Impact Strength [1] (-22°f (-30°c))	34.7 ft·lb/in²	73.0 kJ/m²	ISO 8256
Drop Impact Resistance			
-40°f (-40°c), Rotomoulding	> 5.17 in·lb/mil	> 230 J/cm	ARM
-4°f (-20°c), 0.126 In (3.20 Mm), Rotomoulding [2]	> 4.50 in·lb/mil	> 200 J/cm	Internal Method
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Vicat Softening Temperature	223 °F	106 °C	ISO 306/A

Notes

[1] Notched

[2] Based on ISO 6603

Notes

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