

Icorene 4220-8444G-106FDAR Yellow

LyondellBasell Industries - High Density Polyethylene

General Information

Product Description

Icorene 4220 is a high density polyethylene for rotational molding applications. The grade is UV stabilized and suitable for applications requiring good stiffness and processability.

General

Additive	• UV Stabilizer		
Features	• Good Toughness	• UV Resistant	• UV Stabilized
Uses	• General Purpose	• Outdoor Applications	
Appearance	• Natural Color		
Forms	• Powder		
Processing Method	• Rotational Molding		

Properties¹

Physical	Nominal Value	Unit	Test Method
Density	0.940 to 0.944	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	1.5 to 2.5	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			
10% Igepal, F50	50.0	hr	ASTM D1693
100% Igepal, F50	400	hr	ASTM D1693A
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	3310	psi	ASTM D638
Flexural Modulus - 1% Secant ³	145000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Impact Strength			ARM
-40°F, 0.125 in, Rotational Molded	58	ft-lb	
-40°F, 0.250 in, Rotational Molded	> 190	ft-lb	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	146	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.0492 in, Rotational Molded	108	°F	ASTM D648

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 in/min

³ 0.051 in/min