TECHNICAL INFORMATION

MULTI TRADE GROUP
YOUR GLOBAL PARTNER

MultiPoly™ IM9200
High Density Polyethylene Resin

Overview

MultiPoly™ IM9200 is a high-density polyethylene (HDPE) grade developed for injection molding. It delivers a strong balance of toughness, stress crack resistance, and processability, with a very narrow molecular weight distribution for consistent performance.

Key Features & Benefits

- Excellent toughness and durability
- Strong environmental stress crack resistance
- Reliable processability for molders
- Narrow molecular weight distribution ensuring uniformity

Typical Applications

- Housewares
- Toys
- Food containers
- Pails and similar molded products

Additive	▪ Antiblock: No	▪ Slip: No	▪ Processing Aid: No	
Physical	**Nominal Value (English)**		**Nominal Value (SI)**	**Test Method**
Density	0.954 g/cm³		0.954 g/cm	ASTM D792
Base Density[1]	0.954 g/cm³		0.954 g/cm	MFR Method
Melt Index (190°C/2.16 kg)	20 g/10 min		20 g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR) 122°F (50°C), 100% Igepal, F50	< 3.00 hr		< 3.00 hr	ASTM D1693
Mechanical	**Nominal Value (English)**		**Nominal Value (SI)**	**Test Method**
TENSILE STRENGTH[2]				ASTM D638
Yield	4100 psi		28.3 MPa	
Break	2000 psi		13.8 MPa	
TENSILE ELONGATION				ASTM D638
Yield	7.0 %		7.0 %	
Break	250 %		250 %	
FLEXURAL MODULUS - 2% SECANT	167000 psi		1150 MPa	ASTM D790B
Impact	**Nominal Value (English)**		**Nominal Value (SI)**	**Test Method**
Tensile Impact Strength [2]	20.0 ft·lb/in²		42.0 kJ/m²	ASTM D1822
Hardness	**Nominal Value (English)**		**Nominal Value (SI)**	**Test Method**
Durometer Hardness (Shore D)	57		57	ASTM D2240

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Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	163 °F	72.8 °C	ASTM D648
Brittleness Temperature	< -105 °F	< -76.1 °C	ASTM D746
Vicat Softening Temperature	261 °F	127 °C	ASTM D1525
Melting Temperature (DSC)	266t °F	130 °C	MFR Method
Peak Crystallization Temperature (DSC)	243t °F	117 °C	MFR Method
ADDITIONAL INFORMATION			
Plaque molded and tested in accordance with ASTM D4976.			

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.
1 Base density is estimated using the assumption that every 1000 ppm of anti block in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any anti block.
2 Type S

Compliance & Regulations

- FDA 21 CFR 177.1520 (c)3.2a
- FDA – DMF
- Canadian HPFB – No Objection
- EU Regulation No 10/2011

Disclaimer

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