

DOW HDPE 12450N

High Density Polyethylene

Product Description

- For structural foam, tote boxes and industrial containers
- Excellent impact strength and toughness and moderate stiffness
- Complies with U.S. FDA 21 CFR 177.1520 (c) 3.2a.

Polyethylene 12450N High Density is narrow molecular weight distribution polymer designed to offer excellent impact strength and toughness with moderate stiffness. This resin has excellent processability over a wide range of molding conditions.

Processing Method : Injection Molding

Physical	Nominal Value	Unit	Test Method
Density -Specific Gravity	0.952	sp gr 23/23°C	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	12.0	g/10 min	ASTM D1238
Enviro. Stress Crack Res	6.00	hr	ASTM D1693
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength @ Yield 3	3400	psi	ASTM D638
Tensile Strength @ Break 3	2000	psi	ASTM D638
Tensile Elongation @ Yld	3.0	%	ASTM D638
Tensile Elongation @ Brk 3	600	%	ASTM D638
Flexural Modulus 4	2% Secant: 117000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Tensile Impact Strength	130	ft-lb/in ²	ASTM D1822
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness	56		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
DTUL @66psi - Unannealed	151	°F	ASTM D648
Brittle Temperature	-105	°F	ASTM D746
Vicat Softening Point	261	°F	ASTM D1525
Melting Point	264	°F	DSC
Peak Crystallization Temperature (DSC)	239	°F	ASTM D3418

When used unmodified for the manufacture of food contact articles, DOW HDPE 12450N will comply with Food Additive Regulations FDA 21 CFR 177.1520(c) 3.2a under the U.S. Food, Drug and Cosmetic Act. Such uses are subject to good manufacturing practices and any other limitations which are part of the statute or regulations. These should be consulted for complete details.

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

2 in/min, 0.125 in

0.125 in