

HD52-400

High Density Polyethylene

HD52-400 is a certified prime copolymer designed for injection molding applications requiring good balance of mechanical properties. **HD52-400** features easy processability, good stiffness, good impact strength, high warp-age resistance and excellent dimensional stability and is suitable for handling materials where resistance to low temperature impact and toughness is required. **HD52-400** is not UV stabilized. Recommended processing temperature is 210 to 250°C. with mold @ 20 to 40°C. **HD52-400** complies with FDA regulation 21CFR 177.1520 (c) 3.1 (a) + 3.2 (a) and with most international regulations concerning the use of Polyethylene in contact with food articles.

PROPERTIES	ASTM	UNIT	NOMINAL VALUES
PHYSICAL			
Melt Flow Rate (190 °C, 2.16kg)	D1238	g/10 min	4.0
Density	D1505	g/cm ³	0.952
MECHANICAL			
Flexural Modulus ¹	D790	psi	160k
Tensile Strength @ Yield ²	D638	psi	4000
Elongation @ Break ²	D638	%	1000
Tensile Impact Strength	D1822	ft. lb/in ²	27.0
Stress Crack Resistance (122 °F Comp. Mold F50)	D1693B	hr	10
HDT Under Load (66 psi unannealed)	D746	°F	167

Typical Value of Properties not to be construed as specifications

* Test Made on injection molded Type 1 tension test specimen according to ASTM D2146

1 - @ 0.051 in/min

2 - @ 2 in/min.



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