

Technical Data Sheet

Alathon H6030

High Density Polyethylene

Product Description

Alathon H6030 is a homopolymer that provides enhanced processability, excellent stiffness and short molding cycles. Typical applications include thin wall and deep-draw.

Regulatory Status

For regulatory compliance information, see Alathon H6030 [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Application	Containers; Lids; Overcaps
Market	Rigid Packaging
Processing Method	Injection Molding

Typical Properties	Nominal Value	English Units	Nominal Value	SI Units	Test Method
Physical					
Melt Flow Rate, (190 °C/2.16 kg)	30	g/10 min	30	g/10 min	ASTM D1238
Density, (23 °C)	0.965	g/cm ³	0.965	g/cm ³	ASTM D1505
Bulk Density	37-39	lb/ft ³	593-625	kg/m ³	ASTM D1895
Spiral Flow	15.7	in	39.9	cm	LYB Method
Mechanical					
Flexural Modulus					
(1% Secant)	224000	psi	1540	MPa	ASTM D790
(2% Secant)	187000	psi	1290	MPa	ASTM D790
Flexural Young's Modulus	241000	psi	1680	MPa	ASTM D790
Tensile Modulus, (1% Secant)	135000	psi	931	MPa	ASTM D638
Tensile Young's Modulus	157000	psi	1080	MPa	ASTM D638
Tensile Stress at Break, (23 °C)	4100	psi	28.3	MPa	ASTM D638
Tensile Elongation at Break, (23 °C)	4.4	%	4.4	%	ASTM D638
Impact					
Notched Izod Impact Strength, (23 °C)	0.4	ft-lb/in	21.4	J/m	ASTM D256
Unnotched Impact Strength, (-18 °C)	5.2	ft-lb/in	278	J/m	ASTM D4812
Hardness					
Shore Hardness, (Shore D, max)	72		72		ASTM D2240
Thermal					
Vicat Softening Temperature	261	°F	127	°C	ASTM D1525
Deflection Temperature Under Load, (66 psi, Unannealed)	181	°F	83	°C	ASTM D648
Melting Temperature	269.8	°F	132.1	°C	ASTM D3418
Crystallization Temperature	243.0	°F	117.2	°C	ASTM D3418

Notes

Conditions of Tensile Stress and Elongation values are: 50 mm/min, Type IV specimen.

Conditions of Flexural Modulus values are: 0.5 inches/min or 12.5 mm/min.

Conditions of Tensile Modulus values are: 50 mm/min, Type I Specimen.

Spiral Flow measures the number of inches of flow produced when molten resin is injected into a long, spiral channel (0.0625" insert), at a constant injection pressure of 1000 psi with a melt temperature of 440 °F.

Deflection Temperature Under Load and Low Temperature Brittleness data are for control and development work and are not intended for use in design or predicting performance at elevated or sub-ambient temperatures.

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