Technical Data Sheet

Alathon H5275

High Density Polyethylene

Product Description

Alathon H5275 is a high-flow resin that exhibits enhanced processing and thermal stability for fast cycling in multi-cavity molds, good color and organoleptic properties. Typical applications are rigid food containers and consumer houseware products.

Regulatory Status

For regulatory compliance information, see *Alathon* H5275 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

Status	Commercial
Availability	North America
Application	Housewares; Lids; TWIM Food Containers
Market	Consumer Products; 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)	75	g/10 min	75	g/10 min	ASTM D1238
Density, (23 °C)	0.952	g/cm³	0.952	g/cm³	ASTM D1505
Bulk Density	37-39	lb/ft³	593-625	kg/m³	ASTM D1895
Mechanical					
Flexural Modulus					
(1% Secant)	166000	psi	1145	MPa	ASTM D790
(2% Secant)	140000	psi	962	MPa	ASTM D790
Flexural Young's Modulus	190000	psi	1310	MPa	ASTM D790
Tensile Stress at Break, (23 °C)	3310	psi	19	MPa	ASTM D638
Tensile Elongation at Break, (23 °C)	3.7	%	3.7	%	ASTM D638
Impact					
Notched Izod Impact Strength, (23 °C)	0.4	ft-lb/in	21	J/m	ASTM D256
Hardness					
Shore Hardness, (Shore D, max)	67		67		ASTM D2240
Thermal					
Vicat Softening Temperature	251.6	°F	122	°C	ASTM D1525
Melting Temperature	261.8	°F	127.7	°C	ASTM D3418
Crystallization Temperature	236.0	°F	113.4	°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.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.