

Technical Data Sheet

Alathon H5650

High Density Polyethylene

Product Description

Alathon H5650 is a multi-purpose high-flow resin that exhibits enhanced processing and thermal stability for fast cycling in multi-cavity stack molds. This resin also exhibits good color and organoleptic properties. Typical applications are rigid food containers and aerosol can overcaps.

Application Caps & Closures; 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)	50	g/10 min	50	g/10 min	ASTM D1238
Density, (23 °C)	0.956	g/cm ³	0.956	g/cm ³	ASTM D1505
Bulk Density	37-39	lb/ft ³	593-625	kg/m ³	ASTM D1895
Mechanical					
Flexural Modulus					
(1% Secant)	196000	psi	1352	MPa	ASTM D790
(2% Secant)	166000	psi	1145	MPa	ASTM D790
Flexural Young's Modulus	230000	psi	1586	MPa	ASTM D790
Tensile Stress at Break, (23 °C)	3475	psi	24	MPa	ASTM D638
Tensile Stress at Yield, (23 °C)	3740	psi	25.8	MPa	ASTM D638
Tensile Elongation at Break, (23 °C)	4.8	%	4.8	%	ASTM D638
Impact					
Notched Izod Impact Strength, (23 °C)	0.5	ft-lb/in	27	J/m	ASTM D256
Hardness					
Shore Hardness, (Shore D, max)	64		64		ASTM D2240
Thermal					
Vicat Softening Temperature	257	°F	125	°C	ASTM D1525
Melting Temperature	267.6	°F	130.9	°C	ASTM D3418
Crystallization Temperature	241	°F	116.1	°C	ASTM D3418