Alathon® H 5520

High Density Polyethylene

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Injection Molding Grade
Melt Index 20 Density 0.955

Applications

ALATHON H 5520 provides good processing characteristics and exhibits excellent toughness and color as well as low odor and good molded-part stability. Typical applications include housewares, caps, closures and various food containers.

Certification

H 5520 meets the requirements of the Food and Drug Administration regulation 21 CFR 177.1520. This regulation allows the use of this olefin polymerin "...articles or components of articles intended for use in contact with food." Specific limitations or conditions of use may apply. Contact your Equistarsales or technical service representative for more information.

Processing Techniques

Specific recommendations for processing H 5520 can only be made when the processing conditions, equipment and end use are known. For further suggestions, please contact your Equistar sales representative.

Suggested Start-up Conditions

Extruder Zone	**Rear**	**Center**	**Front**	**Nozzle**
Cylinder Temperature °F (°C)	450 (232)	470 (243)	475 (246)	475 (246)

Property	Nominal Value	Units	ASTM Test Method
Melt Index	20	g/10 min	ASTM D 1238
Density	0.955	g/cc	ASTM D 1505
Spiral Flow[1]	14.2 (36.1)	in	Equistar
Tensile Strength @ Break	3,250 (22)	psi (MPa)	ASTM D 638
Tensile Strength @ Yield[2]	4,160 (29)	psi (MPa)	ASTM D 638
Elongation @ Yield[2]	8.1	%	ASTM D 638
1% Secant Modulus[3]	183,000 (1,260)	psi (MPa)	ASTM D 790
2% Secant Modulus[3]	151,000 (1,040)	psi (MPa)	ASTM D 790
Vicat Softening Point	259 (126)	°F (°C)	ASTM D 1525
Hardness, Shore D	65		ASTM D 2240
Heat Deflection Temperature, 66 psi	165 (74)	°F (°C)	ASTM D 648
Low Temperature Brittleness, F_{50}	-90 (-68)	°F (°C)	ASTM D 746

[1] Measures the number on inches of flow produced when molten resin is injected into a long, spiral channel (0.625" insert), at a constant injection pressure of 1000 psi with a melt temperature of 440°F.
[2] Crosshead speed - 2" min
[3] Crosshead speed - 0.5" min