Technical Data Sheet

AlathonM8008UV (Preliminary Data Sheet)

Tel: +90 212 514 34 55 (pbx)

High Density Polyethylene

Product Description

AlathonM8008UV is a homopolymer that enhances processing and stiffness, exhibits excellent color, low odor and good processing stability. Typical applications include cases, crates, trays, tote bins and open-head pails. M8008UV contains a UV stabilizer for outdoor applications.

Regulatory Status

For regulatory compliance information, see AlathonM8008UV (Preliminary Data Sheet) Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS). To obtain copies of these documents, please contact your LyondellBasell product safety representative.

Status	Developmental
Availability	North America
Application	Crates; Pallets/Trays/Tote Bins
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)	8.0	g/10 min	8.0	g/10 min	ASTM D1238
Density	0.965	g/cm³	0.965	g/cm³	ASTM D1505
Spiral Flow	9.1	in	23.1	cm	LYB Method
Mechanical					
Flexural Modulus					
(1% Secant)	256500	psi	1769	MPa	ASTM D790
(2% Secant)	214700	psi	1480	MPa	ASTM D790
Tensile Modulus, (1% Secant)	179000	psi	1234	MPa	ASTM D638
Tensile Young's Modulus	204200	psi	1408	MPa	ASTM D638
Tensile Stress at Break, (23 °C)	4100	psi	28.3	MPa	ASTM D638
Tensile Stress at Yield, (23 °C)	4770	psi	32.9	MPa	ASTM D638
Tensile Elongation at Break, (23 °C)	16.5	%	16.5	%	ASTM D638
Tensile Elongation at Yield, (23 °C)	6.1	%	6.1	%	ASTM D638
Impact					
Notched Izod Impact Strength, (23 °C)	0.66	ft-lb/in	35	J/m	ASTM D256
Hardness					
Shore Hardness, (Shore D, max)	68		68		ASTM D2240
Thermal					
Vicat Softening Temperature	262	°F	128	°C	ASTM D1525
Low Temperature Brittleness, F50	<-105	°F	<-76	°C	ASTM D746
Deflection Temperature Under Load, (66 psi, Unannealed)	179	°F	81.7	°C	ASTM D648
Melting Temperature	270	°F	132.2	°C	ASTM D3418
Crystallization Temperature	248	°F	120	°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.

Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.

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