

AuroraTec™ 1001

Aurora Material Solutions, LLC - High Density Polyethylene

General Information

Product Description

AuroraTec™ 1001 is a homopolymer with outstanding stiffness with a good balance of processability and Cold Temperature impact
High stiffness
Maximum impact strength and toughness
FDA 21 CFR 177.1520

Formerly known as EnLene 1001

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Processability • High Impact Resistance	• High Stiffness • High Toughness	• Homopolymer • Low Temperature Impact Resistance
Uses	• Crates	• Packaging	• Pails
Agency Ratings	• FDA 21 CFR 177.1520		
Appearance	• Natural Color		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.960		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/5.0 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.126 in)	0.018 to 0.022	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	4800	psi	ASTM D638
Flexural Modulus	250000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	1.0	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	188	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Suggested Shot Size	25 to 75	%
Rear Temperature	450	°F
Middle Temperature	470	°F
Front Temperature	475	°F
Nozzle Temperature	475	°F
Processing (Melt) Temp	485	°F
Mold Temperature	45 to 65	°F
Back Pressure	25.0 to 50.0	psi
Screw Speed	25 to 75	rpm
Vent Depth	1.0E-3 to 1.5E-3	in

Notes

¹ Typical properties: these are not to be construed as specifications.

