



ALTERRA PPI-01

POLYPROPYLENE IMPACT COPOLYMER

Technical Data Sheet | FIN-X Polymers

PRODUCT DESCRIPTION

ALTERRA PPI-01 is a certified prime grade Medium-Impact INJECTION MOLDING specially designed for applications requiring good impact resistance at low temperatures. ALTERRA PPI-01 features very good processability, medium-high flow for fast mold filling, very good dimensional stability, excellent heat resistance, and optimal balance of mechanical properties. ALTERRA PPI-01 typical applications include automotive parts and interior trimming, appliance parts, tackle boxes, gun and tool cases, toys, industrial components, caps, closures and housewares. Recommended processing temperature is between 210° - 220°C. ALTERRA PPI-01 complies with FDA regulation 21CFR 177.1520 (a)(3)(i) / (c)3.1 + 3.2, and with most international regulations concerning the use of Polypropylene in contact with food articles.

GENERAL

Category	Details
Material Status	Commercial: Active
Availability	Latin America North America
Features	Fast Molding Cycle Food Contact Acceptable Good Dimensional Stability Good Processability High Heat Resistance Impact Copolymer Low Temperature Impact Resistance Medium Flow Medium Impact Resistance
Uses	Appliance Components Automotive Applications Caps Fishing Applications Household Goods Industrial Parts Sporting Goods Toys
Agency Ratings	FDA 21 CFR 177.1520(a) 3 (i) FDA 21 CFR 177.1520(c) 3.1 FDA 21 CFR 177.1520(c) 3.2
Forms	Pellets
Processing Method	Injection Molding

TECHNICAL PROPERTIES [1]

Section	Property / condition	Nominal value	Unit	Test method
Physical	Density	0.900	g/cm ³	ASTM D1505
Physical	Melt Mass-Flow Rate (MFR), 230°C / 2.16 kg	12	g/10 min	ASTM D1238
Mechanical	Tensile Strength (Yield) [2, 3]	24.1	MPa	ASTM D638
Mechanical	Tensile Elongation (Yield) [2, 3]	13	%	ASTM D638
Mechanical	Flexural Modulus, 1% Secant [4]	1020	MPa	ASTM D790
Impact	Notched Izod Impact (23°C) [3]	120	J/m	ASTM D256
Hardness	Rockwell Hardness, R-Scale [3]	80		ASTM D785
Thermal	Deflection Temperature Under Load (0.45 MPa, Unannealed) [3]	85.0	°C	ASTM D648
Thermal	Vicat Softening Temperature [3]	140	°C	ASTM D1525
Processing	Processing (Melt) Temperature	210 to 220	°C	

NOTES

1. Typical properties: these are not to be construed as specifications.
2. Tensile test speed: 50 mm/min.
3. Test made on injection molded Type 1 tension test specimen according to ASTM D 2146.
4. Flexural modulus test speed: 1.3 mm/min.

Values are typical and are not to be construed as specifications. Validate performance for the intended application before final material selection.