

ColorRx® PP1-2000LMRX
Americhem - Polypropylene Homopolymer
General Information
Product Description

PP1-2000LMRX is a high flow grade injection molding grade of Polypropylene (PP) homopolymer specifically for laser marking. It is suitable for healthcare applications and sterilizable by EtO and steam at 121°C.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Mold Release		
Features	• Autoclave Sterilizable • Biocompatible • Ethylene Oxide Sterilizable	• Excellent Colorability • Good Mold Release • Laser Markable	• Lubricated • Steam Sterilizable
Uses	• Closures • Housings	• Medical/Healthcare Applications • Surgical Instruments	
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.912		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	20	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield)	4800	psi	ASTM D638
Tensile Elongation ² (Yield)	8.0	%	ASTM D638
Flexural Modulus ²	190000	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, 0.250 in)	220	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	120	°F
Drying Time	2.0 to 4.0	hr
Drying Time, Maximum	6.0	hr
Suggested Shot Size	40 to 60	%
Rear Temperature	360 to 400	°F
Middle Temperature	370 to 410	°F
Front Temperature	380 to 420	°F
Nozzle Temperature	390 to 440	°F
Processing (Melt) Temp	390 to 440	°F
Mold Temperature	50 to 100	°F
Back Pressure	50.0 to 100	psi
Screw Speed	40 to 70	rpm

Notes

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

² 2.0 in/min

