

ColorRx® ABS-1700

Americhem - Acrylonitrile Butadiene Styrene

General Information

Product Description

ColorRx® ABS-1700 is an injection molding grade of high gloss ABS (acrylonitrile butadiene styrene.) It carries ISO 10993-5, USP VI, and 21 CFR food contact compliance. Subject to locked formulary and notification of change protocols. It is suitable for the most stringent healthcare applications.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Biocompatible • E-beam Sterilizable	• Ethylene Oxide Sterilizable • Excellent Colorability	• Radiation Sterilizable
Uses	• Medical/Healthcare Applications	• Surgical Instruments	
Agency Ratings	• FDA 21 CFR 181.32	• ISO 10993-5	• USP Class VI
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.04		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	8.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in)	4.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	440000	psi	ASTM D638
Tensile Strength ² (Yield)	7200	psi	ASTM D638
Tensile Elongation (Yield)	2.4	%	ASTM D638
Flexural Modulus ²	371000	psi	ASTM D790
Flexural Strength	10600	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F)	3.8	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	202	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in)	181	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating ³ (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180 to 200	°F
Drying Time	2.0 to 4.0	hr
Rear Temperature	370 to 410	°F
Middle Temperature	390 to 440	°F
Front Temperature	400 to 460	°F
Nozzle Temperature	415 to 460	°F
Processing (Melt) Temp	425 to 480	°F
Mold Temperature	120 to 160	°F

Notes

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

² 2.0 in/min

