

CYREX® Protect
(PC+PMMA)

Evonik CYRO LLC

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	3	g/10min	ASTM D 1238
Temperature	230	°C	-
Load	3.8	kg	-
Mold Shrinkage, MD	0.006	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Modulus	2140	MPa	ASTM D 638
Tensile Strength	54.5	MPa	ASTM D 638
Elongation at Yield	4	%	ASTM D 638
Elongation at Break	25	%	ASTM D 638
Flexural Modulus	2100	MPa	ASTM D 790
Flexural Strength	92.4	MPa	ASTM D 790
Rockwell Hardness	M 45	-	ASTM D 785
Izod Impact notched, 1/8 in	641	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
UL 94 Flame rating	HB	-	UL 94
Coefficient of Thermal Expansion, MD	93.6	E-6/K	ASTM D 696
Vicat Temperature	130	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water Absorption, Equilibrium	0.3	%	ASTM D 570
Density	1160	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	82	°C	-
Pre-drying - Time	3 - 4	h	-
Melt temperature	238 - 260	°C	-
Mold temperature	65 - 99	°C	-

Characteristics

Special Characteristics

High impact or impact modified, Heat stabilized or stable to heat

Chemical Resistance

Radiation Resistance

Certifications

Medical Grade, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved

Applications

Medical

Regional Availability

North America