

XT® X800RG

PMMA

Evonik CYRO LLC

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	11	g/10min	ASTM D 1238
Temperature	230	°C	-
Load	5	kg	-
Mold Shrinkage, MD	0.0055	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Modulus	3000	MPa	ASTM D 638
Tensile Strength	43.4	MPa	ASTM D 638
Elongation at Yield	4	%	ASTM D 638
Elongation at Break	6	%	ASTM D 638
Flexural Modulus	2200	MPa	ASTM D 790
Flexural Strength	66.9	MPa	ASTM D 790
Rockwell Hardness	M 22	-	ASTM D 785
Izod Impact notched, 1/4 in	101	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	64	J/m	ASTM D 256
Temperature	0	°C	-

Thermal properties	Value	Unit	Test Standard
ASTM Data			
Coefficient of Thermal Expansion, MD	86	E-6/K	ASTM D 696
Vicat Temperature	94	°C	ASTM D 1525

Optical properties	Value	Unit	Test Standard
ASTM Data			
Haze	5	%	ASTM D 1003
Light Transmittance	86	%	ASTM D 1003

Other properties	Value	Unit	Test Standard
Water Absorption, Equilibrium	0.3	%	ASTM D 570
Density	1110	kg/m ³	ASTM D 792
Bulk Density	650	kg/m ³	-

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	82	°C	-
Pre-drying - Time	3 - 4	h	-
Melt temperature	218 - 246	°C	-
Mold temperature	27 - 66	°C	-
Injection pressure	69 - 138	MPa	-
Back pressure	0 - 0.69	MPa	-

Characteristics**Processing**

Injection Molding, Other Extrusion, Thermoforming

Special Characteristics

High impact or impact modified

Features

Light Guiding

Chemical Resistance

General Chemical Resistance, Radiation Resistance

Certifications

Food contact, Food approval FDA 21 CFR, Medical Grade, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved

Applications

Packaging, Sports Equipment

Regional Availability

North America