

Vu-Stat® Y-20

PMMA

Evonik CYRO LLC

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	9	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	2100	MPa	ASTM D 638
Tensile Strength	39.3	MPa	ASTM D 638
Elongation at Yield	3	%	ASTM D 638
Elongation at Break	18	%	ASTM D 638
Flexural Modulus	1700	MPa	ASTM D 790
Flexural Strength	57.2	MPa	ASTM D 790
Rockwell Hardness	L 54	-	ASTM D 785
Izod Impact notched, 1/4 in	68.2	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	26.2	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ASTM Data			
Coefficient of Thermal Expansion, MD	95	E-6/K	ASTM D 696
Vicat Temperature	103	°C	ASTM D 1525

Optical properties	Value	Unit	Test Standard
ASTM Data			
Haze	7	%	ASTM D 1003
Light Transmittance	85	%	ASTM D 1003

Other properties	Value	Unit	Test Standard
Water Absorption, Equilibrium	0.3	%	ASTM D 570
Density	1130	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	204 - 246	°C	-
Mold temperature	32 - 60	°C	-
Zone 1	193 - 224	°C	-
Zone 2	204 - 238	°C	-
Zone 3	204 - 246	°C	-
Nozzle temperature	204 - 246	°C	-
Injection pressure	69 - 138	MPa	-
Back pressure	0.69	MPa	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Anti-static, Transparent

Features

Light Guiding

Certifications

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

Applications

Medical, Packaging

Regional Availability

North America