

PRODUCT INFORMATION

CYROLITE® G-20

Product Profile:

CYROLITE® G-20 is a PMMA-based copolymer for injection molding and extrusion of medical applications.

Typical properties of CYROLITE® G-20 are:

- High Light Transmittance with little haze
- 5 times the impact resistance of unmodified acrylics
- Resistant to body fluids and many chemicals
- Excellent bonding to PVC tubing
- Can be thermal bonded, ultrasonic and laser welded
- Good heat resistance
- Resistance to EtO, gamma and E-beam sterilization

Application:

Used for injection molding and extrusion of medical device and diagnostics industries.

Examples:

Respiratory Device Components, Blood Filter Housings, IV Components

Processing:

CYROLITE® G-20 can be processed in injection molding machines and extrusion lines with 3- zone general purpose screws.

Physical Form / Packaging:

Available in 1500 lb. gaylord boxes; other packaging available on request.

Regulatory and compliance requirements:

Meets requirements of the United States Pharmacopeia Class VI in 001 tint only; ISO 10993-1 in 001 tint only and FDA for food contact for all use conditions up to and including hot filled or pasteurized above 150 degrees F (e.g. Condition 21 CFR 176.170) for all food types except those containing more than 8% alcohol.

Properties:

	Parameter	Unit	Standard	CYROLITE® G-20
Mechanical Properties				
Tensile Modulus	1 mm/min	MPa	ISO 527	2400
Yield Stress	50 mm/min	MPa	ISO 527	51
Yield Strain	50 mm/min	%	ISO 527	3,4
Nominal Strain @ Break		%	ISO 527	11
Charpy Notched Impact Strength	23°C	kJ/m ²	ISO 179/1	11
Thermal Properties				
Vicat Softening Temperature	B / 50	°C	ISO 306	95
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	83
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	79
Coeff. of Linear Therm. Expansion	0 - 50°C	E-5 /°K	ISO 11359	9
Classes of construction product			DIN EN 13501-1	HB
Rheological Properties				
Melt Volume Rate, MVR	230°C & 3,8kg	cm ³ /10min	ISO 1133	1,9
Optical Properties				
	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	85
Haze		%	ASTM D1003	5,0
Refractive Index	589nm/23°C		ISO 489	1,52
Other Properties				
Density		g/cm ³	ISO 1183	1.11

All listed technical data are typical values intended for your guidance. They are given without obligation and do not constitute a materials specification.

Certified to ISO 9001:2015, ISO 14001:2015 and IATF 16949:2016.

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