

## PRODUCT INFORMATION

# CYROLITE® CG-97

### Product Profile:

CYROLITE® CG-97 is a PMMA-based copolymer for injection molding and extrusion of medical applications.

Typical properties of CYROLITE® acrylic-based copolymer compounds 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

The special properties of CYROLITE® CG-97 are:

- Superior resistance to lipids
- Excellent gamma sterilization color stability

### Application:

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

### Examples:

Needle hubs, IV, lab and pediatric filters.

### Processing:

CYROLITE® CG-97 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® CG-97
<b>Mechanical Properties</b>				
Tensile Modulus	1 mm/min	MPa	ISO 527	1700
Yield Stress	50 mm/min	MPa	ISO 527	35
Yield Strain	50 mm/min	%	ISO 527	3,9
Nominal Strain @ Break		%	ISO 527	23
Charpy Impact Strength	23°C	kJ/m <sup>2</sup>	ISO 179/1eU	193
Charpy Notched Impact Strength	23°C	kJ/m <sup>2</sup>	ISO 179/1	14,2
<b>Thermal Properties</b>				
Vicat Softening Temperature	B / 50	°C	ISO 306	82
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	82,4
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	78,6
<b>Rheological Properties</b>				
Melt Volume Rate, MVR	230°C & 3,8kg	cm <sup>3</sup> /10min	ISO 1133	0,54
<b>Optical Properties</b>				
	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	89
Haze		%	ASTM D1003	5,0
<b>Other Properties</b>				
Density		g/cm <sup>3</sup>	ISO 1183	1.09

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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