

Product Information

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CYROLITE® Med 2 acrylic-based multipolymer compound

Product Profile:

CYROLITE Med 2 compound is an impact-modified acrylic-based multipolymer for molding and extrusion of medical applications.

Typical properties of CYROLITE® acrylic-based multipolymer compounds are:

- excellent chemical resistance to fats and oils
- excellent bonding and welding capabilities
- excellent bonding to PVC tubing
- good impact strength
- good light transmission
- good resistance to EtO, gamma and E-beam sterilization

The special properties of CYROLITE Med 2 compound are:

- superior resistance to lipids
- superior resistance to alcohol
- excellent ductility

Application:

Used for injection molding and extrusion of medical devices.

Examples:

Needle hubs, blood separator, IV, lab and pediatric filters.

Processing:

CYROLITE Med 2 compound can be processed in injection molding machines and extrusion lines with 3- zone general purpose screws.

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	ASTM-Standard	CYROLITE® Med 2 compound
Mechanical Properties				Typical Value
Tensile Strength		psi [MPa]	D 638	5320 [36.7]
Tensile Modulus		x10 ⁶ psi [GPa]	D 638	0.25 [1.7]
Tensile Elongation @ Yield		%	D 638	3.9
Tensile Elongation @ Break		%	D 638	22.0
Flexural Strength		psi [MPa]	D 790	8590 [59.2]
Flexural Modulus		x10 ⁶ psi [GPa]	D 790	0.24 [1.6]
Notched Izod	¼" bar @23°C	ft-lb/in [J/m]	D 256	2.2 [117]
Rockwell Hardness		M Scale	D 785	33
Thermal Properties				
Vicat Softening Point		°F [°C]	D 1525	201 [94]
Deflection Temperature, Annealed	1.8MPa, 0.250"	°F [°C]	D 648	163 [73]
Coeff. of Linear Therm. Expansion	32 – 312°F	in/ in/°F	D 696	0.000048
Coeff. of Linear Therm. Expansion	0 – 100°C	mm/mm/°C	D 696	0.000086
Rheological Properties				
Melt Flow Rate	230°C & 5.0 kg	g/10min	D 1238	2.1
Optical Properties	d = 3.2 mm			
Light Transmission		%	D 1003	85
Haze		%	D 1003	7.0
Yellowness Index			Cyro TM	-1.0
Other Properties				
Specific Gravity			D 792	1.08
Water Absorption		% Max	D 570	0.38
Mold Shrinkage		in/in, mm/mm	D 955	0.005 – 0.007
Bulk Density		g/cc	D 1895	0.65
Recommended processing conditions				
Predrying Temperature		°F [°C]		160 [71]
Predrying Time		hour		3 – 4
Melt Temperature		°F [°C]		420 – 480 [215 – 249]
Mold Temperature		°F [°C]		120 – 180 [49 – 82]

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

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