CYROLITE® G-20 HIFLO®

Polymethyl Methacrylate Acrylic

Evonik Cyro LLC

Message:

CYROLITE G-20 HIFLO compound is an impactmodified 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 G-20 HIFLO compound are:
excellent melt flow rate
good heat resistance
Used for injection molding and extrusion of medical devices, medical packaging, as well as toys and appliance parts.

General Information	
Additive	Impact Modifier
Features	Bondability
	E-beam Sterilizable
	Ethylene Oxide Sterilizable
	Good Chemical Resistance
	Good Impact Resistance
	High Clarity
	High Flow
	Impact Modified
	Medium Heat Resistance
	Radiation Sterilizable
	Weldable
Uses	Appliance Components
	Bottles
	Connectors
	Medical Packaging
	Medical/Healthcare Applications
	Toys
	Valves/Valve Parts
Agency Ratings	EC 1907/2006 (REACH)
	FDA 21 CFR 177.1010
	USP Class VI
Appearance	Clear/Transparent

	Colors Available
Forms	Pellets
Processing Method	Extrusion
	Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.11	g/cm³	ASTM D792
Apparent Density	0.65	g/cm³	ASTM D1895
Melt Mass-Flow Rate (MFR) (230°C/5.0 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.40 to 0.70	%	ASTM D955
Water Absorption (24 hr)	0.30	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	27		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2550	MPa	ASTM D638
Tensile Strength (Yield)	48.3	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	3.6	%	
Break	9.5	%	
Flexural Modulus	2140	MPa	ASTM D790
Flexural Strength (Yield)	64.8	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			ASTM D256
0°C, 6.35 mm	59	J/m	
23°C, 6.35 mm	100	J/m	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Annealed, 6.35 mm)	85.6	°C	ASTM D648
Vicat Softening Temperature	101	°C	ASTM D1525
CLTE - Flow (0 to 156°C)	9.3E-5	cm/cm/°C	ASTM D696
Optical	**Nominal Value**	**Unit**	**Test Method**
Transmittance (3200 µm)	89.0	%	ASTM D1003
Haze (3200 µm)	6.0	%	ASTM D1003
Yellowness Index (3.20 mm)	-0.30	YI	Internal Method
Injection	**Nominal Value**	**Unit**	
Drying Temperature	79.4	°C	
Drying Time	3.0 to 4.0	hr	
Processing (Melt) Temp	193 to 238	°C	
Mold Temperature	48.9 to 82.2	°C	

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China