Product Information

ACRYLITE® Resist ZK-F polymer

Product Profile:

ACRYLITE® Resist ZK-F polymer is an amorphous, impact-modified thermoplastic molding and extrusion compound based on polymethyl methacrylate (PMMA).

Typical properties of ACRYLITE® Resist acrylic polymers are:
- high weather resistance
- high light transmission
- improved resistance to stress cracking
- good melt flow rate
- easy to color

The special properties of ACRYLITE® Resist ZK-F polymer are:
- medium impact/break resistance and strength
- high melt flow rate
- high heat resistance
- FDA food contact use

Application:

Used for injection molded parts.

Examples:

Light covers, fountain pens, appliance housings, appliance lenses and housewares.

Processing:

ACRYLITE® Resist ZK-F polymer 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.

Properties:

	Parameter	Unit	ASTM-Standard	ACRYLITE® Resist ZK-F polymer
Mechanical Properties				Typical Value
Tensile Strength		psi [MPa]	D 638	8200 [56.2]
Tensile Modulus		x10⁶ psi [GPa]	D 638	0.33 [2.3]
Tensile Elongation @ Yield		%	D 638	5
Tensile Elongation @ Break		%	D 638	25
Flexural Strength		psi [MPa]	D 790	10000 [68.9]
Flexural Modulus		x10⁶ psi [GPa]	D 790	0.29 [2.0]
Notched Izod	¼" bar @23°C	ft-lb/in [J/m]	D 256	0.75 [39.6]
Notched Izod	¼" bar @0°C	ft-lb/in [J/m]	D 256	0.45 [23.9]
Rockwell Hardness		M Scale	D 785	65
Thermal Properties				
Vicat Softening Point	264 psi	°F [°C]	D 1525	208 [98]
Deflection Temperature, Annealed	1.8MPa, 0.250"	°F [°C]	D 648	196 [91]
Coeff. of Linear Therm. Expansion	32 - 312°F	in/ in/°F	D 696	0.00004
Coeff. of Linear Therm. Expansion	0 - 100°C	mm/mm/°C	D 696	0.000072
Rheological Properties				
Melt Flow Rate	230°C & 3.8 kg	g/10min	D 1238	13.0
Optical Properties	d = 3.2 mm			
Light Transmission		%	D 1003	92
Haze		%	D 1003	1
Yellowness Index			D 1925	0.3
Other Properties				
Specific Gravity			D 792	1.17
Water Absorption		% Max	D 570	0.3
Mold Shrinkage		in/in, mm/mm	D 955	0.003 - 0.006
Bulk Density		g/cc	D 1895	0.71

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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