

## ACRYLITE<sup>®</sup> Resist ZK-P polymer

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### Product Profile:

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

Typical properties of ACRYLITE<sup>®</sup> 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<sup>®</sup> Resist ZK-P polymer are:

- medium impact/break resistance and strength
- medium melt flow rate
- high heat resistance
- AMECA listed
- FDA food contact use

### Application:

Used for injection molded parts.

### Examples:

Light covers, automotive tail light lenses, appliance housings, appliance lenses and housewares.

### Processing:

ACRYLITE<sup>®</sup> Resist ZK-P 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-P polymer
<b>Mechanical Properties</b>				Typical Value
Tensile Strength		psi [MPa]	D 638	10500 [72.4]
Tensile Modulus		x10 <sup>6</sup> psi [GPa]	D 638	0.40 [2.8]
Tensile Elongation @ Yield		%	D 638	5
Tensile Elongation @ Break		%	D 638	20
Flexural Strength		psi [MPa]	D 790	15700 [72.4]
Flexural Modulus		x10 <sup>6</sup> psi [GPa]	D 790	0.40 [2.8]
Notched Izod	¼" bar @23°C	ft-lb/in [J/m]	D 256	0.60 [31.5]
Notched Izod	¼" bar @0°C	ft-lb/in [J/m]	D 256	0.35 [18.5]
Rockwell Hardness		M Scale	D 785	80
<b>Thermal Properties</b>				
Vicat Softening Point	264 psi	°F [°C]	D 1525	219 [104]
Deflection Temperature, Annealed	1.8MPa, 0.250"	°F [°C]	D 648	198 [92]
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
<b>Rheological Properties</b>				
Melt Flow Rate	230°C & 3.8 kg	g/10min	D 1238	4.5
<b>Optical Properties</b>				d = 3.2 mm
Light Transmission		%	D 1003	92
Haze		%	D 1003	1
Yellowness Index			D 1925	0.3
<b>Other Properties</b>				
Specific Gravity			D 792	1.18
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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