

## ACRYLITE® Satinice ZD 23 polymer

### Product Profile:

ACRYLITE® Satinice ZD 23 polymer is an amorphous, impact-modified light diffusing thermoplastic molding and extrusion compound based on polymethyl methacrylate (PMMA).

Typical properties of ACRYLITE® Satinice zdf polymers are:

- high weather resistance
- superior light diffusion (hiding power) and transmittance
- improved resistance to stress cracking
- good melt flow rate
- easy to color

The special properties of ACRYLITE® Satinice ZD 23 polymer are:

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

### Application:

Used for injection molded parts.

### Examples:

Injection molded light covers requiring filament hiding capabilities, fountain pens, appliance housings, appliance lenses and housewares.

### Processing:

ACRYLITE® Satinice ZD 23 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® Satinice ZD 23 polymer
<b>Mechanical Properties</b>				Typical Value
Tensile Strength		psi [MPa]	D 638	6400 [44.1]
Tensile Modulus		x10 <sup>6</sup> psi [GPa]	D 638	0.25 [1.7]
Tensile Elongation @ Yield		%	D 638	4
Tensile Elongation @ Break		%	D 638	20
Flexural Strength		psi [MPa]	D 790	10000 [69.0]
Flexural Modulus		x10 <sup>6</sup> psi [GPa]	D 790	0.26 [1.8]
Notched Izod	¼" bar @23°C	ft-lb/in [J/m]	D 256	1.0 [52.5]
Notched Izod	¼" bar @0°C	ft-lb/in [J/m]	D 256	0.5 [26.3]
Rockwell Hardness		M Scale	D 785	44
<b>Thermal Properties</b>				
Vicat Softening Point	264 psi	°F [°C]	D 1525	226 [108]
Deflection Temperature, Annealed	1.8MPa, 0.250"	°F [°C]	D 648	185 [85]
Coeff. of Linear Therm. Expansion	32 - 312°F	in/ in/°F	D 696	0.00005
Coeff. of Linear Therm. Expansion	0 - 100°C	mm/mm/°C	D 696	0.00009
<b>Rheological Properties</b>				
Melt Flow Rate	230°C & 3.8 kg	g/10min	D 1238	3.1
<b>Optical Properties</b>				d = 3.2 mm
Light Transmission		%	D 1003	85
Haze		%	D 1003	96
Yellowness Index			D 1925	5.5
<b>Other Properties</b>				
Specific Gravity			D 792	1.15
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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