



Product Information

## ACRYLITE® Satinice ZD 24 polymer

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### Product Profile:

ACRYLITE® Satinice ZD 24 polymer is an amorphous, impact-modified light diffusing thermoplastic molding and extrusion compound based on polymethyl methacrylate (PMMA).

Typical properties of ACRYLITE® Satinice zd 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 24 polymer are:

- high impact/break resistance and strength
- high melt strength
- high heat resistance

### Application:

Used for extrusion applications including profiles and sheet.

### Examples:

Light fixtures and automotive interior applications.

### Processing:

ACRYLITE® Satinice ZD 24 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 24 polymer |
|-----------------------------------|----------------|----------------------------|---------------|----------------------------------|
| <b>Mechanical Properties</b>      |                |                            |               | Typical Value                    |
| Tensile Strength                  |                | psi [MPa]                  | D 638         | 7330 [51]                        |
| Tensile Modulus                   |                | x10 <sup>6</sup> psi [GPa] | D 638         | 0.33 [2.3]                       |
| Tensile Elongation @ Yield        |                | %                          | D 638         | 4 - 6                            |
| Tensile Elongation @ Break        |                | %                          | D 638         | 43                               |
| Flexural Strength                 |                | psi [MPa]                  | D 790         | 18700 [128.9]                    |
| Flexural Modulus                  |                | x10 <sup>6</sup> psi [GPa] | D 790         | 0.30 [2.1]                       |
| Notched Izod                      | ¼" bar @23°C   | ft-lb/in [J/m]             | D 256         | 0.62 [32.3]                      |
| Rockwell Hardness                 |                | M Scale                    | D 785         | 63                               |
| <b>Thermal Properties</b>         |                |                            |               |                                  |
| Vicat Softening Point             | 264 psi        | °F [°C]                    | D 1525        | 208 [98]                         |
| Deflection Temperature, Annealed  | 1.8MPa, 0.250" | °F [°C]                    | D 648         | 182 [83]                         |
| 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                         |
| Flammability UL 94                | 1.6 mm         | Class                      | IEC 707       | UL 94 HB                         |
| <b>Rheological Properties</b>     |                |                            |               |                                  |
| Melt Flow Rate                    | 230°C & 3.8 kg | g/10min                    | D 1238        | 0.80                             |
| <b>Optical Properties</b>         |                |                            |               |                                  |
|                                   | d = 3.2 mm     |                            |               |                                  |
| Light Transmission                |                | %                          | D 1003        | 87                               |
| Haze                              |                | %                          | D 1003        | 97                               |
| Yellowness Index                  |                |                            | D 1925        | 3                                |
| Refractive Index                  |                |                            | D 542         | 1.49                             |
| <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                      |

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