

## PRODUCT INFORMATION

# ACRYLITE® Satinice df 23 8N light diffusing acrylic polymer

### Product Profile:

ACRYLITE® Satinice df23 8N is an amorphous thermoplastic molding and extrusion compound based on polymethyl methacrylate (PMMA) and diffusion polymers.

Typical properties of ACRYLITE® molding compound are:

- excellent weather resistance
- high mechanical strength
- high surface hardness and mar resistance
- good melt flow rate
- superior light diffusion (hiding power) and transmittance

The special properties of ACRYLITE® Satinice df23 8N are:

- excellent light diffusion combined with excellent light transmission
- highest heat resistance
- high melt strength
- low levels of lubricant

### Application:

Used for injection molding and extrusion of lighting luminaries, instrument displays and extruded profiles.

### Examples:

Commercial and residential lighting covers, electronics and point-of-purchase displays.

### Processing:

ACRYLITE® Satinice df23 8N can be processed in injection molding machines and extrusion lines with 3-zone general purpose screws.

### Physical Form / Packaging:

Available in 1500 lb. gaylord boxes; other packaging available on request.

**Properties:**

	Parameter	Unit	ASTM-Standart	ACRYLITE® Satinice df 23 8N light diffusing acrylic polymer Typical Value
<b>Mechanical Properties</b>				
Tensile Strength		psi [MPa]	D 638	11500 [79.3]
Tensile Modulus		x10 <sup>6</sup> psi [GPa]	D 638	0.55 [3.8]
Tensile Elongation @ Yield		%	D 638	4
Tensile Elongation @ Break		%	D 638	4
Flexural Strength		psi [MPa]	D 790	19000 [131]
Flexural Modulus		x10 <sup>6</sup> psi [GPa]	D 790	0.5 [3.5]
Notched Izod	¼" bar @23°C	ft-lb/in [J/m]	D 256	0.3 [16]
Rockwell Hardness		1	D 785	95
<b>Thermal Properties</b>				
Vicat Softening Point	50N, 50°C/h	°F [°C]	D 1525	246 [119]
Deflection Temperature, Annealed	1.8MPa, 0.250"	°F [°C]	D 648	221 [105]
Coeff. of Linear Therm. Expansion	32 - 312°F	1/F	D 696	0.00004
Coeff. of Linear Therm. Expansion	0 - 100°C	1/C	D 696	0.000072
<b>Rheological Properties</b>				
Melt Flow Rate	230°C & 3.8 kg	g/10min	D 1238	2.9
<b>Optical Properties</b> d = 3.2 mm				
Light Transmission		%	D 1003	86
Haze		%	D 1003	96
Yellowness Index			E 313	<6.5
<b>Other Properties</b>				
Specific Gravity			D 792	1.19
Water Absorption		% Max	D 570	0.3
Mold Shrinkage		in/in, mm/mm	D 955	0.003 - 0.006
Bulk Density		in/in, mm/mm	D 1895	0.66
<b>Recommended Processing Conditions</b>				
Predrying Temperature		F [°C]		175 [80]
Predrying Time in Desiccant-Type Drier		h		3 – 4
Melt Temperature		F [°C]		464 - 482 [240 - 250]
Mold Temperature (Injection Molding)		F [°C]		100 - 175 [38 - 80]
Die Temperature (Extrusion)		F [°C]		464 - 482 [240 - 250]

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

Certified to ISO 9001:2015, ISO 14001:2015 and IATF 16949:2016.

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The logo for RÖHM, featuring the word "RÖHM" in a bold, black, sans-serif font. The letter "O" is replaced by a circle with a horizontal line through it, resembling a stylized "O" or a specific character.