

## TECHNICAL INFORMATION

# ACRYLITE® Satinice Optimum Light Diffusion

## Enhanced light diffusing acrylic sheet for backlighting



### PRODUCT

The ACRYLITE® Satinice optimum light diffusion portfolio offers four additional grades with higher light transmission and wider diffusion. Designed for architectural and linear LED lighting applications, these superior ACRYLITE® Satinice specialty acrylic grades are offered in sheet and molding compounds. Injection molded, blow molded or custom extruded profile lenses are available through your preferred convertor partner using ACRYLITE® Satinice molding compounds.

### PROPERTIES


ACRYLITE® Satinice provides the following outstanding properties:

- Four enhanced grades provide high light transmission with a wide range of diffusion to optimize luminaire efficacy and eliminate LED hot spots
- Sheet grades have same transmission and diffusion across all thickness (molding compounds match at 2mm)
- Matte surface (when extruded) provides better light scattering, glare reduction and scratch resistance
- Colorless diffusion reduces color shift compared to pigmented white materials

### DIFFUSER SHEET COMPARISONS



## ACRYLITE® SATINICE – ACRYLIC SHEET

Increasing Light Diffusion 

	WD852	WD853	WD854	WD855
* Stocked Thickness (mm)	1.5, 2.0, 3.0			
** Standard Dimension	96" x 48"			
<b>Lighting Properties</b>				
*** Light Transmission % @ 2 mm	92	85	79	72
**** Half Angle @ 2 mm	20	30	40	50
<b>Recognitions (UL 94HB)</b>				
RTI90		✓		
f1 Outdoor		✓		

\* Material can be manufactured in other thicknesses, dimensions, and/or with impact modifier (minimums may apply)

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\*\*\* Measurements recorded with BYK Gardner Haze Gard Plus machine

\*\*\*\*The angle having half the light intensity of a collimated beam shone through a sample perpendicular to the light source. Twice the half angle is defined as the FWHM (Full Width Half Maximum)

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### Fire Precautions

ACRYLITE® sheet is a combustible thermoplastic. Precautions should be taken to protect this material from flames and high heat sources. ACRYLITE® sheet usually burns rapidly to completion if not extinguished. The products of combustion, if sufficient air is present, are carbon dioxide and water. However, in many fires sufficient air will not be available and toxic carbon monoxide will be formed, as it will when other common combustible materials are burned. We urge good judgement in the use of this versatile material and recommend that building codes be followed carefully to assure it is used properly.

### Compatibility

Like other plastic materials, ACRYLITE® sheet is subject to crazing, cracking or discoloration if brought into contact with incompatible materials. These materials may include cleaners, polishes, adhesives, sealants, gasketing or packaging materials, cutting emulsions, etc. See the Tech Briefs in this series for more information, or contact your ACRYLITE® sheet Distributor for information on a specific product.

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