

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 form.

Product Specification

Color	Color Number*	Size	Thickness
Colorless	WD852		
	WD853	96" x 48"	.060" 1.5 mm
	WD854		.080" 2.0 mm .118" 3.0 mm
	WD855		.110 3.0 mm

^{*}The higher the color number, the higher the diffusion property of the acrylic sheet.

Material can be manufactured in other thicknesses, dimensions, and/or with impact modifier. Minimums may apply.

Properties

ACRYLITE® Satinice provides the following outstanding properties:

 Enhanced grades provide high light transmission with a wide range of diffusion to optimize luminaire efficacy and eliminate LED hot spots



- Sheet grades have the same transmission and diffusion across all thickness
- Matte surface provides better light scattering, glare reduction and scratch resistance
- Colorless diffusion reduces color shift compared to pigmented white materials

Optical Properties

Property	WD852	WD853	WD854	WD855
Light Transmission % @ 2 mm	92	85	79	72
Half Angle @ 2 mm	20	30	40	50

Notes: 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).

UL Ratings

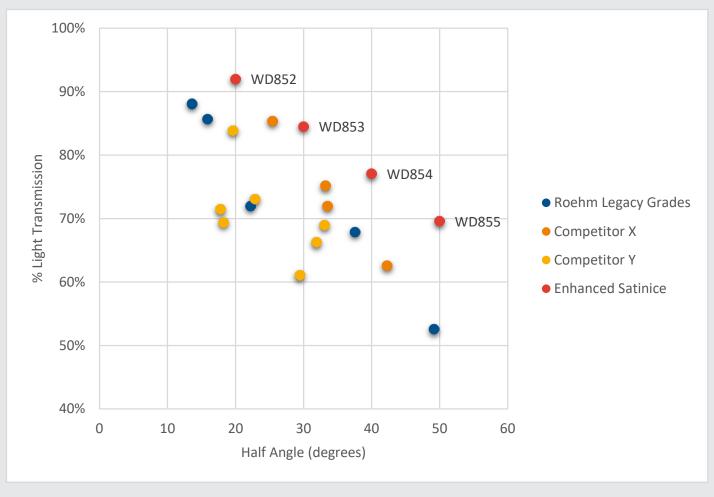
- RTI90 per UL746B
- HB (horizontal burn) per UL94
- (f1) Outdoor Suitable for outdoor use with respect to exposure to ultraviolet light, water exposure and immersion in accordance with UL 746C



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Diffuser Sheet Comparisons



Roehm America LLC

Acrylic Products

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Röhm GmbH and its affiliates are a worldwide manufacturer of PMMA products sold under the PLEXIGLAS® trademark on the European, Asian, African and Australian continents and under the ACRYLITE® trademark in the Americas.

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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