

Technical Information

PLEXIGLAS® LED Pure White WH52



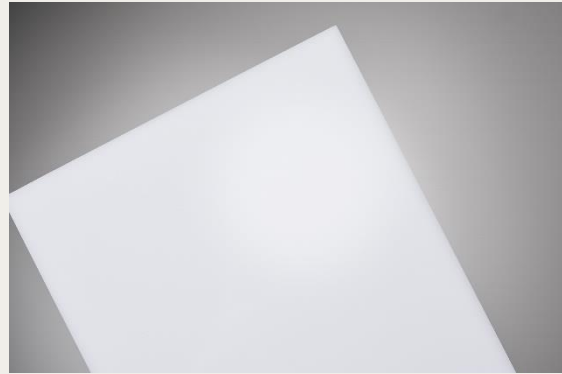
PRODUCT

These translucent cast acrylic sheets have been specially developed for backlighting with LEDs, such as in illuminated signs.

PLEXIGLAS® LED for backlighting Pure White WH52 appears brilliantly white in daylight and when not illuminated. In darkness and with backlighting switched on, PLEXIGLAS® LED Pure White WH52 shows the well-known good light-diffusing properties along with balanced light transmission (see Fig. 2).

Particularly in signage, shopfitting, and trade-show booth construction, the combination of LEDs and PLEXIGLAS® LED scores with maximum efficiency and excellent lighting technology. Advertising is often illuminated around the clock, so energy-saving designs are becoming increasingly important. PLEXIGLAS® LED, backlit with advanced LED technology, consumes less energy than conventional fluorescent or neon lamps and is also low-maintenance. Only with the right choice of material can the potential of LEDs be fully exploited.

PLEXIGLAS® LED Pure White WH52 is distinguished by its optimized radiant white color impression when not illuminated. This is evident in a direct comparison with other white translucent grades for backlighting (see Fig. 1). Particularly when illuminated with cold white light (6500K), PLEXIGLAS® LED Pure White WH52 has a sophisticated, upscale appearance. This means that illuminated signs catch the eye by both night and day.



PROPERTIES

In addition to the known and well-proven properties of PLEXIGLAS®, such as:

- very high weathering resistance
- easy processability
- 100% recyclability

PLEXIGLAS® LED Pure White WH52 has the following special features:

- brilliantly glowing white in reflected light
- no LED hot spots, thanks to optimized light diffusion
- 44% light transmission

APPLICATIONS

Due to these special properties PLEXIGLAS® LED Pure White WH52 is particularly suitable for:

- signage
- shopfitting and trade-show booth construction
- special-effect light walls in architecture

PROCESSING

PLEXIGLAS® LED Pure White WH52 is processed in the same way as standard PLEXIGLAS®. The following guides to processing of PLEXIGLAS® are available:

- Machining PLEXIGLAS® (no. 311-1)
- Forming PLEXIGLAS® (no. 311-2)
- Joining PLEXIGLAS® (no. 311-3)
- Fabricating tips for PLEXIGLAS® solid sheets (no. 311-5)



Fig. 1: Comparison of white tone by daylight: normal translucent white in signage (right); PLEXIGLAS® LED Pure White WH52 (left)

DELIVERY FORMS

PLEXIGLAS® LED for backlighting Pure White WH52 can be supplied ex stock in thicknesses of 3 and 5 mm.

PLEXIGLAS® LED FOR BACKLIGHTING

Color	Grade	Light transmission τD65
Pure White	WH52	44%

The sizes available are listed in the PLEXIGLAS® Sales Handbook. Please contact us.



Fig. 2: Good light diffusion properties without visible hot spots from the LEDs

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Certified to DIN EN ISO 9001 (quality) and DIN EN ISO 14001 (environment)

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Ref.-No. 222-31

EVONIK PERFORMANCE

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