

## PRODUCT INFORMATION

# PLEXIGLAS® Edgelight 8N LD96

### Product Profile:

PLEXIGLAS® Edgelight 8N LD96 is a highly transparent light guide material based on PLEXIGLAS® 8N.

In addition to the typical properties of PLEXIGLAS®, such as

- Excellent weather resistance
- UV-stability
- Good flow, high mechanical strength

PLEXIGLAS® Edgelight 8N LD96 is developed for edge lit Edgelight applications. The light scattering properties convert the light guide to a full illuminated panel.

Furthermore, the material allows for a completely transparent view through the light guide when it is not illuminated. This opens a new degree of freedom for designers. PLEXIGLAS® Edgelight 8N LD96 is recommended for panels with a distance of 48 cm to 96 cm between two light injecting Edgelight strips.

### Application:

Preferably, for injection molding, but can also be used for special extrusion.

### Examples:

BLU (Back lighting) for LCD-Displays, illuminated freeform panels, ambient lighting, illuminated handle bars and switches. Illuminated outline contours for devices.

### Processing:

PLEXIGLAS® Edgelight 8N LD96 can be processed on injection molding machines with 3-zone general purpose screws for engineering thermoplastics.

### Physical Form / Packaging:

PLEXIGLAS® Edgelight 8N LD96 is supplied as pellets of uniform size, packaged in 25kg polyethylene bags; other packaging on request.

**Properties:**

	Parameter	Unit	Standard	PLEXIGLAS® EdgeLight 8N LD96
<b>Mechanical Properties</b>				
Tensile Modulus	1 mm/min	MPa	ISO 527	3300
Stress @ Break	5 mm/min	MPa	ISO 527	77
Strain @ Break	5 mm/min	%	ISO 527	5,5
Charpy Impact Strength	23°C	kJ/m²	ISO 179/1eU	20
<b>Thermal Properties</b>				
Vicat Softening Temperature	B / 50	°C	ISO 306	108
Glass Transition Temperature		°C	ISO 11357	117
Temp. of Deflection under Load	0.45 MPa	°C	ISO 75	103
Temp. of Deflection under Load	1.8 MPa	°C	ISO 75	98
Coeff. of Linear Therm. Expansion	0 - 50°C	E-5 /°K	ISO 11359	8
Classes of construction product			DIN EN 13501-1	E
Flammability UL 94	1.5 mm	Class	IEC 60695-11-10	HB
<b>Rheological Properties</b>				
Melt Volume Rate, MVR	230°C / 3,8kg	cm³/10min	ISO 1133	3
<b>Optical Properties</b>				
	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	92
Haze		%	ASTM D1003	< 1
Refractive Index	589nm/23°C		ISO 489	1,49
<b>Other Properties</b>				
Density		g/cm³	ISO 1183	1.19
<b>Recommended Processing Conditions</b>				
Predrying Temperature		°C		max. 98
Predrying Time in Desiccant-Type Drier		h		2 - 3
Melt Temperature		°C		220 - 260
Mold Temperature (Injection Molding)		°C		60 - 90

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.

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer.

Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Röhm is 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.

® = registered trademark

PLEXIGLAS and PLEXIMID are registered trademarks of Röhm GmbH.

Röhm GmbH • Darmstadt • Germany  
plexiglas.polymers@roehm.com  
www.plexiglas-polymers.com

Ref. No.: MC518 A1142

The logo for Röhm, featuring the word "RÖHM" in a bold, black, sans-serif font. The letter "O" has two dots above it, indicating it is a capital letter with an umlaut.