PLEXIGLAS®
THE ORIGINAL BY RÖHM

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 competely 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
Mechanical Properties				
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
Thermal Properties				
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
Rheological Properties				
Melt Volume Rate, MVR	230°C / 3,8kg	cm³/10min	ISO 1133	3
Optical Properties	d=3 mm			
Luminous transmittance	D65	%	ISO 13468-2	92
Haze		%	ASTM D1003	< 1
Refractive Index	589nm/23°C		ISO 489	1,49
Other Properties				
Density		g/cm³	ISO 1183	1.19
Recommended Processing Conditions				
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.

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