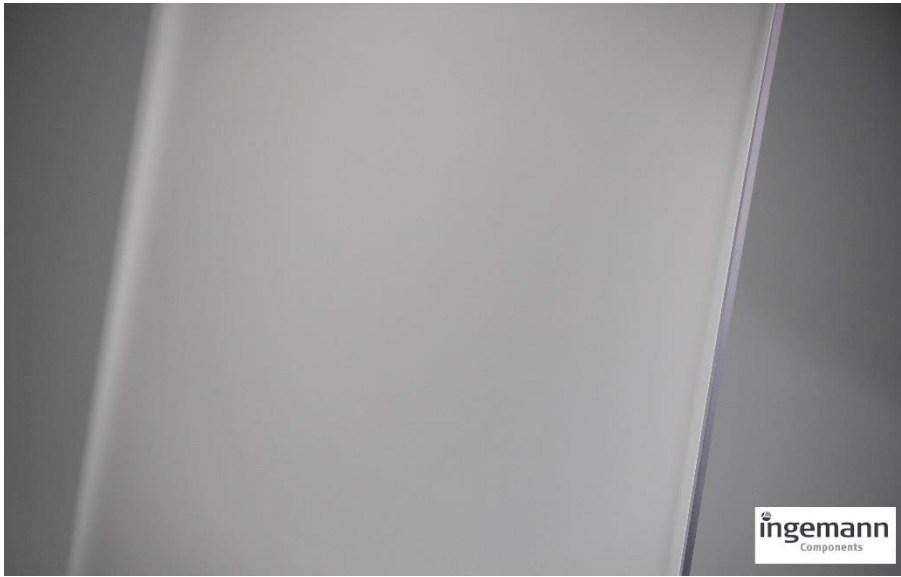


I-DIF20, I-DIF26 and I-DIF35

PET



I-DIF20/26/35

High diffusing PET sheet that provides fantastic lamp hiding capabilities and high transmission.

67.6-99% Transmission
0.1mm thickness
Max temp +60°C
Custom sizes available

Description:

The I-DIF series offers an extremely high transmittance while still maintain a string diffusion, hence being very energy efficient. Due to its optical properties of the material, I-DIF offers a wide range of illumination angles and lamp hiding capabilities. The I-DIF is thin and flexible enables creative design and allows for efficient production process.

Service information:

For samples, pricing and delivery please contact us at:
+45 4618 6644
Email:
sales@ingemanncomponents.com

Looking for a solution with this product, click [here](#).

Application:

The sheet is often placed in front of an LGP to effectively diffuse, but can also be used in a clear profile or in combination with MicroPrism.

Product data	
Standard Material	PET
Available size:	Rectangle up to 1213x603mm
Thickness	0.1 mm \pm 10%
Refractive Index	1.575
Transmittance	99%, 91.4%, 67.6%
HWHM	20°, 26°, 35°
Temperature Range	-40°C to +60°C

Ingemann Components
Tingbjergvej 6
4632 Bjæverskov
Denmark

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Technical Specs – I-DIF20/26/35

I-DIF20/26/35

Properties	0.1 mm	Notes
Physical –		
Density	1.38 g/cm ³	
Rockwell Hardness	112	
Optical –		
Transmittance	67,6% – 99%	
Refractive index	1.575	
Reflection	N/A	
Mechanical –		
Tensile strength	75 MPa	
Thermal –		
Long term temp.	–40°C to +60°C	
Short term temp.	80°C	
Melting temp.	250°C	
Surface	Glossy on one side, matte on the other side	
UV stable	Yes	
Dirt depreciation	Anti-static treatment	
Chemical Resistance		See next page
Thermal expansion	7 K ⁻¹ x10 ⁻⁵	
Glow wire test IEC 60695-2-12	N/A	
Fire Rating	N/A	

Processing options at Ingemann Components

Processing	Yes/No	Notes
Milling	No	
CNC Knife	Yes	Recommended processing
Laser Cutting	Yes	Recommended processing
Saw	No	
Die Cut	Yes	
Thermo-forming	No	
Print	Yes	

Product	PET Diffuser Plate		
Thickness	Standard 0.1 mm		
	I-DIF20	I-DIF26	I-DIF35
Total Transmittance	99%	91.4%	67.6%
HWHM*	20°	26°	35°

*Half Width Half Maximum

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Chemical Resistances

I-DIF20/26/35

Chemical resistance at 20°C			
Acetone	-	Ethyl acetate	-
Ammonia	-	Glycerin	+
Amyl Alcohol	o	Fuel oil	+
Benzene, free from aromatics	-	Hexane	+
Benzole	na	Isopropanol	na
Boric Acid	na	Coffee	+
Butanol	+	Caustic potash solution 50%	na
Chlorinated hydro-carbon	na	Ketone	-
Chloroform	-	Methylene chloride	-
Chlorinated water/air	na	Lactic acid 10%	na
Dibutyl phthalate	+	Mineral oil	+
Diocetyl phthalate	na	Caustic soda	na
Glacial acetic acid	na	Nitrocellulose lacquer	na
Acetic essence	-	Oxalic acid	+
Aqueous acetic acid	-	Wax	+
Ethanol	+	Hydrogen peroxide	+
Acidity of wine	+	Hydrochloric acid conc. 35%	-
Xylene	+	Sodium carbonate	+
Paraffin	+	Salad vinegar	+
Petroleum ether	+	Stearic Acid	+
Phosphoric acid 10%	o	Tea	+
Sulphuric acid 10%	o	Turpentine	+
Nitric acid 10%	o	Toluene	+
Hydrochloric acid 10%	o	Potassium Hydroxide	-

- + Resistant
- o Limited resistance
- Not Resistant
- na Not available

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The logo for Ingemann Components, featuring the word "ingemann" in a bold, lowercase sans-serif font with a small circular icon above the 'i', and the word "Components" in a smaller, uppercase sans-serif font below it.