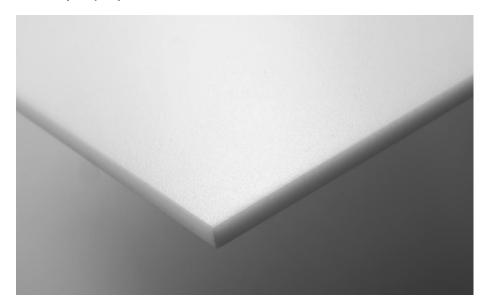
Ingemann Components

Lumieo® II

PMMA (acrylic)



Description:

Lumieo S84 is a diffuser sheet made from polymethyl methacrylate. It is a premium white acrylic sheet which gives high transmittance and excellent lamp hiding capabilities. Compared to Lumieo S84, Lumieo II has 5% better light transmittance while still maintaining lamp hiding capabilities.

Application:

Lumieo S84 is an excellent choice for those applications where lamp hiding, and transmission efficiency are required. Lumieo can be thermoformed.

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 <u>here</u>.

Product data Standard Material PMMA – acrylic Available size: Rectangle up to 1524x1270mm Thickness Standard 0.75mm ±0.127mm Refractive Index 1.491 Transmittance 80% Temperature Range –40°C to +70°C

LUMIEO® II

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

> 80% Transmission 0.75mm thickness Max temp +70°C Custom sizes available

Ingemann Components
Tingbjergvej 6
4632 Bjæverskov
Denmark
www.ingemanncomponents.com



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Technical Specs - Lumieo® II

Properties	0.75 mm	Notes	
Physical -			
Density	$1.18 \ g/cm^3$		
Rockwell Hardness	113		
Optical -			
Transmittance	80%		
Refractive index	1.491		
Reflection	N/A		
Mechanical -			
Tensile strength	69.6 MPa		
Thermal -			
Long term temp.	-40°C to +70°C		
Short term temp.	90°C		
Melting temp.	130°C		
Surface	Structured on one side and glossy on the other side		
UV stable	Yes		
Dirt depreciation	Anti-static treatment		
Chemical Resistance		See next page	
Thermal expansion	$7 K^{-1} x 10^{-5}$		
Glow wire test IEC 60695-2-12			
Fire Rating	N/A		

Processing options at Ingemann Components

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

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Chemical Resistances

Chemical resistance at 20°C			
Acetone	-	Ethyl acetate	-
Ammonia	+	Glycerin	+
Amyl Alcohol	-	Fuel oil	0
Benzene, free from aromatics	+	Hexane	+
Benzole	-	Isopropanol	0
Boric Acid	+	Coffee	+
Butanol	-	Caustic potash solution	+
Chlorinated hydro-carbon	-	Ketone	-
Chloroform	-	Methylene chloride	-
Chlorinated water/air	0	Lactic acid 10%	+
Dibutyl phthalate	-	Mineral oil	+
Dioctyl phthalate	-	Caustic soda	+
Glacial acetic acid	-	Nitrocellulose lacquer	-
Acetic essence	-	Oxalic acid	+
Aqueous acetic acid	+	Wax	+
Ethanol	0	Hydrogen peroxide	0
Acidity of wine	+	Hydrochloric acid conc. 35%	+
Xylene	-	Sodium carbonate	+
Paraffin	+	Salad vinegar	+
Petroleum ether	+	Stearic Acid	+
Phosphoric acid 10%	+	Tea	+
Sulphuric acid 10%	+	Turpentine	+
Nitric acid 10%	+	Toluene	-
Hydrochloric acid 10%	+	Diluting agent	-

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

LUMIEO® II

At 20°C PMMA is resistant to hydrocarbons, aromatic free carburetor fuel, mineral oils, vegetableand animal fats and oils, water, aqueous salt solutions, diluted acids and alkalis. Aromatic hydrocarbons and hydrogen chlorides, ester, ether and ketones attack and degrade PMMA.

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