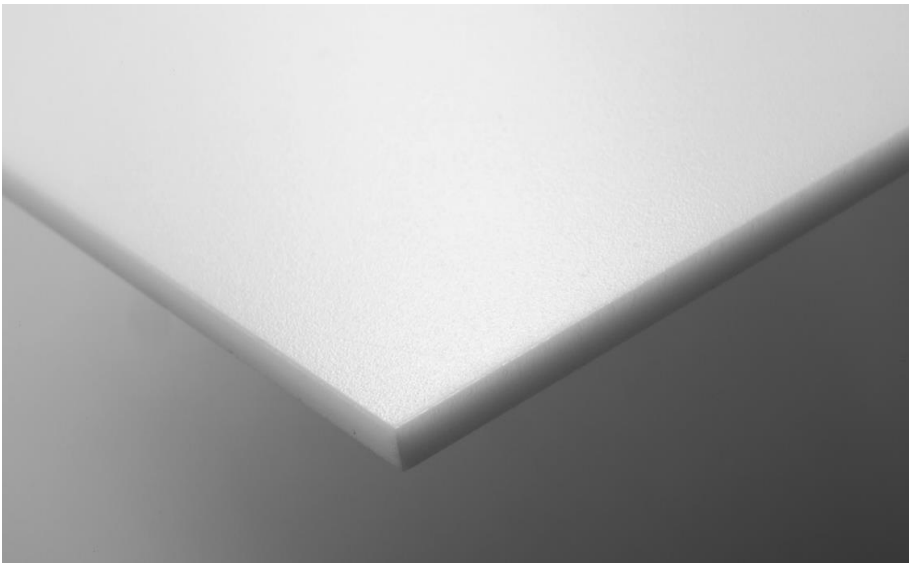


Ingemann Components

Lumieo® S84 0.5mm

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. The diffusion comes from a combination of fine structure and special additives.

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 [here](#).

LUMIEO® S84 0.5

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

80% Transmission

0.5mm thickness

Max temp +70°C

Custom sizes available

Product data	
Standard Material	PMMA – acrylic
Available size:	Rectangle up to 2489x1270mm Square 1270x1270mm
Thickness	Standard 0.5 mm ± 0.127mm
Refractive Index	1.491
Transmittance	80%
Temperature Range	–40°C to +70°C

Ingemann Components
Tingbjergvej 6
4632 Bjæverskov
Denmark

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Technical Specs - Lumieo® S84 0.5mm

LUMIEO® S84 0.5

Properties	0.5 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	Glossy on both sides	
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	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	o
Benzene, free from aromatics	+	Hexane	+
Benzole	-	Isopropanol	o
Boric Acid	+	Coffee	+
Butanol	-	Caustic potash solution	+
Chlorinated hydro-carbon	-	Ketone	-
Chloroform	-	Methylene chloride	-
Chlorinated water/air	o	Lactic acid 10%	+
Dibutyl phthalate	-	Mineral oil	+
Diocetyl phthalate	-	Caustic soda	+
Glacial acetic acid	-	Nitrocellulose lacquer	-
Acetic essence	-	Oxalic acid	+
Aqueous acetic acid	+	Wax	+
Ethanol	o	Hydrogen peroxide	o
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® S84 0.5

At 20°C PMMA is resistant to hydrocarbons, aromatic free carburetor fuel, mineral oils, vegetable- and 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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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.