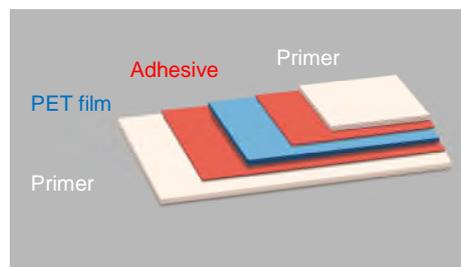


AKASOL® IL

Primer + Polyester + Primer

General

AKASOL® IL (Insulation Layer) is a KREMPEL laminate with a PET film as core layer and with primer layer on both sides. AKASOL® IL is used for insulating and covering the cross connection links in the PV module. In order to obtain a visually flawless and uniform appearance for the front side of the module, the insulation layers are made with the same types of film and primer as the backsheet laminates. Laminates with the same color, degree of gloss and structure as the covering on the rear of the module are thus available. The laminates are characterized by their outstanding mechanical, electrical and chemical properties.



Typing of the laminate	Unit	Test procedure	Typical values
Thickness of the PET film core layer	µm	EN 60674-2	50
Thickness of the primer layers	µm	EN 60674-2	50
Color of the primer layer	-	-	white
Reflection of visible light (380 – 780 nm) ¹⁾	%	EN 410	75
Reflection of radiation (280 – 2500nm) ¹⁾	%	EN 410	61
Other types available on request: black (IL b)			
Characteristics of the laminate			
Thickness of the complete laminate	mm	EN 60674-2	0.165
Area weight of the complete laminate	g/m ²	EN 60674-2	185
Dimensional stability, MD + TD (30 min. / 150 °C)	%	EN 60674-2	≤ 1.6
UV resistance ²⁾	-	ISO 4892-3	Test passed
Optical characteristics after conditioning at 85°C/85%rh/2000h ³⁾	-	IEC 61215, IEC 61646 Preconditioning	No change in color or appearance
Relative Thermal Index (RTI) ⁴⁾	°C	IEC 60216-5	105

- 1) Direct solar radiation
- 2) 2000h UV exposure with 0.68 W/m²; 340 nm; 60°C; 500 min. wetting; 1000h condensation. Total exposure time 3000h.
- 3) Tested in a test module
- 4) Generic thermal index according to UL 746B table 7.1

Processing AKASOL® IL

AKASOL® IL has a symmetrical structure. Therefore it's no need to laminate in defined direction. The optical appearance of it's surface fits to the surface of the Primer side (= cell side) of all AKASOL® PTL, AKASOL® PVL, AKALIGHT ECS® types.

Delivery forms for AKASOL® IL

- **Standard roll width:**
preferred widths: 15, 20, 50 mm, other widths on request
- **Standard roll length:**
150 m;
other lengths on request
- **Formats:**
according to customer requirements and drawing
- **Packaging:**
Stable corrugated cardboard boxes
- **Standard sleeves:**
Interior diameter: 76 mm

Storage stability of AKASOL® IL

AKASOL® IL should be stored in its original packaging at room temperature ($23 \pm 2^\circ\text{C}$) in a dry environment ($50 \pm 5\%\text{rh}$). The storage duration is at least 12 months.