Technical data sheet

vakuVIP UltraLight



Description:

- Ultra high-performance insulation due to very low density and low thermal conductivity
- Vacuumed product core made from PUR
- High-barrier film with minimal permeability to gases and moisture

Advantages:

- **Very good thermal insulation** due to low thermal conductivity
- **Cold stability**: reliable performance at temperatures down to -70°C
- **Space-saving** due to thin design
- **Customizable**: available in various sizes and shapes to meet individual requirements
- **Quality assurance**: 100% inspection of the internal pressure to < 1 mbar

Applications:

- **Medical technology**: pharmaceutical transport boxes
- **Cold chain logistics**: transport containers
- and many other application possibilities

Dimensions and Tolerances:

Length* / Width* [mm]	***Tolerances***		***Thickness* [mm]***	**Tolerance Thickness* [mm]**
	Length* [mm]	***Width* [mm]***		
150 - 500	+1 / -2	+1 / -2	10 - 20 21 - 60	+1 / -1 +2 / -2
500-1000	+2 / -3	+2 / -3	10 - 20 21 - 60	+1 / -1 +2 / -2
>1000	+3 / -3	+3 / -3	10 - 20 21 - 60	+1 / -1 +2 / -2

**deviating dimensions available on request*

For dimensions over 1000 x 600 mm, the cores are composed of multiple parts.

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Performance Characteristics:

Density	90 kg/m³ according to DIN EN 1602
Weight	approx. 2,25 kg/m² at 25 mm thickness
Compressive strength (Compressive stress at 10 % strain)	≥ 150 kPa according to DIN EN 826
Thermal conductivity λ_{10}-value	≤ 0,008 W/(m*K) initial value before aging at an internal pressure below 1 mbar (measurement value according to DIN EN 12667)
Temperature resistance	-70 to +90°C / -94 to +194°F shortly up to +120°C / 248°F for about 30 min
Service life	under dry conditions (relative humidity < 60%) and temperatures between 5°C – 30°C, up to 2 years depending on the application – (λ_{10} ≤ 0,010 W/(m*K))
Delivery form	packed in cartons on pallets
Safety Instructions	According to the manufacturer, the core is not a hazardous substance according to Regulation (EC) 1272/2008.

Application Restrictions:

The composite foil of the vakuVIP elements must not be damaged by drilling, cutting, milling, nailing, screwing, or impacting sharp edges, etc. Damage to the foil will result in an increase in the internal pressure of the panels, leading to the loss of vacuum and their excellent thermal insulation properties. The thermal conductivity in the vented state is approximately 0.035 W/(m*K).

Please refer to our processing instructions included with the product upon delivery.

Contact Information

Manufacturer:

Vaku-Isotherm GmbH
Schönborner Str. 37
09669 Frankenberg
Germany

Phone: +49 (0) 37206 – 5787 -10
Email: zentrale@vaku-isotherm.de
Website: www.vaku-isotherm.de

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