VAKUISOTHERM©

Technical data sheet

vakuVIP Standard



Description:

- Ultra high-performance insulation through low density and low thermal conductivity
- High-performance quality specifically for industrial use
- Vacuumed product core made from compressed microporous silica, opacifiers, and fibers
- High-barrier foil 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
- **Environmentally friendly and safe for health**:
  - Ecological and sustainable product through 100% recyclability of the core material
  - Contains no toxic or hazardous substances
  - Contains no glass fibers
- **Customizable**: available in various sizes and shapes to meet individual requirements
- **Durability**: resistant to aging and moisture
- **Quality assurance**: 100% inspection of the internal pressure to < 5 mbar

Applications:

- **Medical technology**: medical transport boxes, insulation of laboratory equipment
- **Cold chain logistics**: cold storage rooms, transport containers, and refrigeration units
- **Household appliances**: refrigerators, freezers
- and many other application possibilities

Dimensions and Tolerances:

Length* / Width* [mm]	***Tolerances***		***Thickness* [mm]***	**Tolerance Thickness* [mm]**
	Length* [mm]	***Width* [mm]***		
150 - 500	+2 / -3	+2 / -3	10 - 20 21 - 60	+1 / -1 +2 / -2
500-1000	+3 / -3	+3 / -3	10 - 20 21 - 60	+1 / -1 +2 / -2
>1000	+3 / -5	+3 / -5	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.

All information is provided to the best of our knowledge. Errors and technical changes are reserved. / REV. 5 as of 25.02.2026

Performance Characteristics:

Density	180 to max. 210 kg/m³ according to DIN EN 1602
Weight	approx. 4 kg/m² at 20 mm thickness
Compressive strength (Compressive stress at 10 % strain)	≥ 125 kPa according to DIN EN 826
Thermal conductivity λ_{10}-value	≤ 0,0040 W/(m*K) initial value before aging at an internal pressure under 5 mbar (measurement value according to DIN EN 12667)
Temperature resistance	-70 to +90°C / -94 to +194°F briefly 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 50 years depending on the application
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 0.020 W/(m*K).

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

Contact Information

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