

## POWER-TEK PB 640/680 ALU



February 2023

with **ECOSE®** TECHNOLOGY



### DESCRIPTION

Power-teK PB 640 / 680 ALU is a pre-assembled rock mineral wool pipe belt for use on pipelines with nominal diameters > 300 mm and for multi-layer installations.

Due to the trapezoid lamella adhered to a tear-resistant, glass mesh reinforced aluminium foil on one side, Power-teK PB 640 / 680 ALU can be shipped on pallets to save space. As there is no need for a supporting structure, the segments can be quickly and easily installed.

Knauf Insulation Power-teK PB 640 / 680 ALU is produced with **ECOSE® Technology**, a patented binder system, based entirely on renewable raw materials.

### PERFORMANCE

Max. service temperature	640 / 680 °C, depending on density (EN ISO 18097)
Service temperature aluminium facing	≤80 °C
Reaction to fire	A1 (EN 13501-1)
Apparent density	ca. 80 / 120 kg/m <sup>3</sup> (EN ISO 29470)
Declaration of performance*	<a href="http://dopki.com/T4305VPCPR">http://dopki.com/T4305VPCPR</a> for PB 640 ALU <a href="http://dopki.com/T4305SPCPR">http://dopki.com/T4305SPCPR</a> for PB 680 ALU

\* for detailed information on DoP please check the product label

### APPLICATION

Defined Power-teK applications:

- Pipe insulation

The product is recommended for thermal, fire and sound insulation of the defined applications within technical insulation:

- **where special sizes of pipe lines need to be insulated**
- **for pipes, where DN > 300 mm**
- **when faster and easier installation is required**

### BENEFITS

- ✓ Suitable for special sizes of pipes
- ✓ Suitable for pipe lines with bigger diameters
- ✓ High maximum service temperature
- ✓ Compressed packaging (logistical advantage)
- ✓ Multilayer installations possible
- ✓ Easy and fast installation
- ✓ ECOSE® Technology



### STANDARDS

Knauf Insulation products are produced according to four of the most important International Management Standards for sustainability ISO 9001 (Quality Management), ISO 14001 (Environmental Management), ISO 50001 (Energy Management) and ISO 45001 (Health and Safety Management), all certified by Tüv Nord.

### CERTIFICATES (VALID FOR ALL):



VALID ONLY FOR  
PB 680 ALU:



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## SPECIFICATIONS

Description	Sign	Description/data										Unit	Standard
		Density (kg/m <sup>3</sup> )	MST	50	100	150	200	250	300	350			
Thermal conductivity depending on temperature	g											°C	EN ISO 849
	λ	PB 640 PB 680	ca. 80 ca. 120	640 680	0,039 0,042	0,046 0,047	0,054 0,054	0,064 0,063	0,077 -	0,091 0,087	- 0,102	W/(mK)	
Water soluble chloride ions (AS quality)	-				≤ 10						ppm	EN ISO 12624	
Water absorption	W <sub>p</sub>				≤ 1,0						kg/m <sup>2</sup>	EN ISO 29767	
Water vapour diffusion resistance	μ				1						-	EN 14303	
Water vapour diffusion equivalent air layer thickness ALU	S <sub>d</sub>				≥ 200						m	EN 12086	
Silicone free	-		No emissions of lacquering disturbing substances									-	-
Melting point of fibres	g				≥ 1000						°C	DIN 4102-17	
Specific heat capacity	c <sub>p</sub>				1030						J/(kgK)	EN ISO 10456	
Designation code	-			MW-EN14303-T9-ST(+)-640-WS1-MV2-CL10 MW-EN14303-T9-ST(+)-680-WS1-MV2-CL10								-	EN 14303

Declared material properties are obtained in the production process and ensured by the factory production control in accordance with the European Standard at the time of manufacture. Observing storage and handling guidelines will maintain performance within published tolerances.

## HANDLING

Knauf Insulation products are easy to handle and easy to install. They are supplied in suitable packaging materials to balance necessary transport protection with sustainable recycling options. Packaging is not designed for long-term storage or exposure to harsh weather conditions. Further product information is mentioned on every pack.

## STORAGE

For longer-term protection on site we recommend storing the product either indoors or alternatively under a roof cover and off the ground. If covered storage is not available, products can be stored outside (open-air-storage) if placed off the ground (keep palletized) and covered with plastic hood (foil), for a maximum of up to 6 months from the date of delivery. Outdoor storage is not recommended during particularly humid months with large fluctuations in temperature.

## STANDARD FORMATS\*

Thickness	30 - 120 mm
Length	2000 - 6000 mm
Width	500 / 1000 mm

\*Other dimensions on request.



Knauf Insulation mineral wool products made with ECOSE® Technology benefit from a formaldehyde-free binder made from rapidly renewable bio-based materials instead of petroleum-based chemicals. The technology has been developed for Knauf Insulation's mineral wool products, enhancing their environmental credentials without affecting the thermal, acoustic or fire performance. Insulation products made with ECOSE® Technology contain no dye or artificial colours – the colour is completely natural.

## Knauf Insulation d.o.o.

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