

## POWER-TEK PS 680



January 2024

with **ECOSE®** TECHNOLOGY



### DESCRIPTION

Power-teK PS 680 is a circular-wound mineral wool pipe section with minimum product tolerances of the inner and outer diameters thanks to the use of cutting-edge production technologies.

The 1200 mm long pipe section has a maximum service temperature of 680 °C and is slit on one side for easier installation. A supporting construction for the cladding is not required.

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

### PERFORMANCE

|                             |   |
|-----------------------------|---|
| Max. service temperature    | 680 °C (EN ISO 18097)   |
| Reaction to fire            | A1 (EN 13501-1)   |
| Density                     | ca.110 -140 kg/m³ (EN ISO 29470) mm                                   |
| Declaration of performance* | <a href="http://dopki.com/T4305JPCPR">http://dopki.com/T4305JPCPR</a> |

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

### APPLICATION

Defined Power-teK applications:

- pipe insulation
- pipe insulation elbows

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

- **Good thermal conductivity with no thermal bridges is needed**
- **Easier application of additional cladding is required.**
- **Optimal rigidity is required**
- **Higher maximum service temperature is needed**

### BENEFITS

- ✓ High maximum service temperature
- ✓ Good thermal conductivity
- ✓ No supporting construction needed
- ✓ Optimal rigidity
- ✓ Easy and fast installation
- ✓ Adapts to the unevenness of pipes
- ✓ 1200 mm length
- ✓ 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:



# POWER-TEK PS 680



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## SPECIFICATIONS

| Description                                   | Sign           | Description/data   |       |       |       |       |       |       | Unit              | Standard     |
|---|----------------|--|-------|-------|-------|-------|-------|-------|-------------------|--------------|
| Thermal conductivity depending on temperature | 9              | 40   | 50    | 100   | 150   | 200   | 300   | 350   | °C                | EN ISO 849   |
|   | λ              | 0,038  | 0,039 | 0,045 | 0,053 | 0,062 | 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     |
| Silicone free                                 | -              | No emissions of lacquering disturbing substances   |       |       |       |       |       |       | -                 | -            |
| Melting point of fibres                       | 9              | ≥ 1000   |       |       |       |       |       |       | °C                | DIN 4102-17  |
| Specific heat capacity                        | C <sub>p</sub> | 1030   |       |       |       |       |       |       | J/(kgK)           | EN ISO 10456 |
| Designation code                              | -              | MW-EN14303-T8-ST(+)-680-WS1-CL10 (OD < 150 mm)<br>MW-EN14303-T9-ST(+)-680-WS1-CL10 (OD ≥ 150 mm) |       |       |       |       |       |       | -                 | 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         | 20 - 160 mm |
| Internal diameter | 15 - 324 mm |
| Length            | 1200 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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