KNAUF INSULATION Technical Solutions

www.knaufinsulation-ts.com

POWER-TEK NFS 750

POWER-TEK

July 2022

DESCRIPTION

Knauf insulation Power-teK Needled Felt 750 is made of long mineral wool fibres specially needled to form a compact, dimensionally-stable felt with high temperature stability and exceptional thermal insulation properties. Due to its highest insulation performance standards, it can be used for insulation, where operating temperatures may reach as high as 750 °C. Owing to the unique fibre bonding process, the felts do not contain organic binders or process aids and therefore comply with LGA test for contaminants. With this special production process we are able to guarantee that no emissions of odorous and/or harmful substances are emitted during the use even at the highest temperatures. Needled felts are tested for the presence of the restricted substances and comply to the RoHS directive and REACH regulation.

PERFORMANCE

Max. operating temperature	750 °C
Reaction to fire	A1 (EN 13501-1)
Apparent density	ca. 110 kg/m³ (EN 1602)
Declaration of performance*	http://dopki.com/

* for detailed information on DoP please check the product label

APPLICATION

Insulation of systems where operating temperatures may reach 750 °C

Defined applications:

- Pipe insulation
- Pipe insulation elbows
- Furnaces & other equipment
- Boilers

BENEFITS

- ✔ High temperature stability and resistance
- ✔ Thermal insulation properties ensure optimal energy efficiency and energy consumption
- ✔ Non-corrosive insulation material (AS Quality))
- ✔ Fire protection (A1) – material melting point above1000 °C
- ✔ No organic binders
- ✔ Emission-free
- ✔ Custom forms and sections
- ✔ Can be laminated with aluminium foil or glass veil

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

RAL GÜTEZEICHEN Erzeugnisse aus MINERALWOLLE · EUCEB · TÜVRheinland® LGA · RoHS 2 2011/65/EU

challenge. create. care.

www.knaufinsulation-ts.com

POWER-TEK NFS 750

July 2022

SPECIFICATIONS

Description	Sign	Description/data						Unit	Standard
Thermal conductivity depending on temperature	ϑ	10	50	100	150	200	250	°C	EN 12667
	λ	0,034	0,039	0,047	0,057	0,068	0,082	W/(mK)	
Melting point of fibres	ϑ	≥ 1000						°C	DIN 4102-17
Water soluble chloride ions (AS quality)	-	≤ 10						ppm	EN 13468
Weighted sound absorbtion coefficient	α_w	0,5						-	
Formaldehyde emissions at 350 °C	-	≤ 2							
Fluoride emissions at 350 °C	-	≤ 0,3							
Release of MIC	-	< 0,005							
Surface burning chrasteristics	CFC[1]	0						-	UL 723 ASTM E84
	FS[2]	0						-	
	CSD[2]	0,0						-	
	SDI[2]	0						-	

[1] *Calculated Flame Spread*
[2] *FSI – Flame Spread Index*
[3] *CSD – Calculated Smoke Developed*
[4] *SDI – Smoke Developed Index*
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.

Knauf Insulation d.o.o.
Trata 32, 4220 Škofja Loka, Slovenia | E-mail: ts@knaufinsulation.com

challenge.
create.
care.