

# KNAUF INSULATION DAP NFS H

August 2017

Needled felts for professional household appliances and night storage heaters.



## DESCRIPTION

**Knauf insulation DAP NEEDED FELT H (DAP NFSH)** products are made of long mineral wool fibres specially needled to form a compact, dimensionally stable felt with high temperature stability and excellent thermal insulation properties. Due to its highest insulation performance standards, it can be used for insulating professional household appliances and night storage heaters, as well as self-cleaning pyrolytic ovens, where operating temperatures may reach as high as 750 °C. Product dimensions, sections and facing options can all be adapted to customer requirements.

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, valid for mineral fibres in cookers and ovens. With this special production process we are able to guarantee that no emissions of odorous and/or harmful substances are emitted during the use of oven sand cookers 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

### Maximum service temperature

DAP NFS H has a maximum service temperature of 750 °C

### Thermal insulation

Optimal thermal insulation properties ensure ideal energy efficiency and energy consumption

### Certified quality

LGA Certified  
Complies with RoHS Directive  
Complies with REACH Regulation

## BENEFITS

- ✓ High temperature stability and resistance
- ✓ Thermal insulation properties ensure optimal energy efficiency and energy consumption
- ✓ Non-corrosive insulation material (AS Quality)
- ✓ Fire protection (European Class A1) - material melting point above 1000 °C
- ✓ Fire Hazard Classification FHC 0/0
- ✓ No organic binders
- ✓ Emission-free
- ✓ Custom forms and sections

## APPLICATION

Insulation of **professional electric or gas ovens and night storage heaters** that meet or exceed energy **Class A** standards.

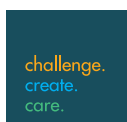
Insulation of **self-cleaning, pyrolytic ovens and night storage heaters** where operating temperatures may reach as high as 750 °C.

## STANDARD

**Technical properties of Knauf Insulation DAP NFS H are declared in accordance with EN 14303.**

Knauf Insulation DAP NFS H is manufactured in accordance with ISO 9001 Quality Management Systems, ISO 14001 Environmental Management Systems, ISO 50001 Energy Management Systems and OHSAS 18001 Occupational Health and Safety Management Systems as certified by Bureau Veritas.

## CERTIFICATES



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### TECHNICAL PROPERTIES

Characteristics	Symbol	Value									Unit	Standard
Reaction to fire	-	Euroclass A1									-	EN 13501-1
Melting point	-	> 1000									°C	DIN 4102/T17
Maximum service temperature	ST(+)	750									°C	EN 14706
Water soluble chloride ions	-	≤10									mg/kg	EN 13468
Thermal conductivity in relation to temperature (ϑ/λ) EN 14303	T <sub>m</sub>	150	200	250	300	400	500	600	650	°C	EN 12667	
	λ	0.049	0.056	0.064	0.072	0.091	0.113	0.140	0.155	W/mK		
Weighted sound absorption coefficient	α <sub>w</sub>	0,5									-	DIN EN ISO 11654
Formaldehyde emissions at 350°	-	≤5									mg/kg	DIN EN ISO 16000-3
Surface burning characteristics	CFC <sup>1)</sup>	0									-	UL 723 ASTM E84
	FSI <sup>2)</sup>	0									-	
	CSD <sup>3)</sup>	0.0									-	
	SDI <sup>4)</sup>	0									-	

<sup>1)</sup> CFS - Calculated Flame Spread

<sup>2)</sup> FSI - Flame Spread Index

<sup>3)</sup> CSD - Calculated Smoke Developed

<sup>4)</sup> SDI - Smoke Developed Index

### HANDLING & STORAGE

Knauf Insulation DAP NFS H is packed on a wooden or plastic pallet. Felts are covered with PE foil or wrapped twice with stretch foil, which is designed for short-term protection only. It is recommended to store the product either indoors, or under a cover and off the ground, for a maximum of up to 12 months.

If the material becomes damp on location, ensure the moisture evaporates before placing the felts into a manufacturing process.

The performance of DAP NFS H depends on the customer's manufacturing process. Individual customers must optimize and control their manufacturing process to ensure the material meets the requirements of their manufacturing process and their final product.



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challenge.  
create.  
care.