



## Products in needled felt - DAP Needed Felt A

Products made with DAP Needed Felt A comprise long rock wool fibres woven together by mechanical needling on both sides. This process makes the material extremely compact. These products feature stable dimensions and high heat resistance. Moreover, they do not contain binding resins and can be supplied die-cut, according to customer specifications, without a support or attached to a sheet of aluminium or other coverings on request on one or both sides. They are mainly used for heat insulation in the electrical appliance industry thanks to their elevated resistance to high temperatures and their total non-combustibility. They are particularly suitable for reaching or exceeding Class A energy standards in the insulation of traditional or ventilated electric or gas ovens.

Products made from DAP Needed Felt A can be supplied with densities ranging from 60 to 130 kg/m<sup>3</sup>, depending on thickness and design, in order to obtain a product with correct resistance to handling. Thicknesses can vary from 12 to 40 mm.

## TECHNICAL PROPERTIES

Feature	Value	Unit of measurement	Standard
Reaction to fire	Euroclass A1	-	EN 13501
Melting temperature	> 1000	°C	DIN 4102/T17
Working temperature	≤ 780	°C	EN 14706
Water vapour diffusion resistance (μ)	1.4	-	EN 12086
<b>Thermal conductivity (λ) at an average temperature of</b>			
50 °C	0.038	W/m·K	EN 12667
100 °C	0.048	W/m·K	EN 12667
200 °C	0.068	W/m·K	EN 12667
300 °C	0.098	W/m·K	EN 12667
AS quality	Suitable for insulation with austenitic steel		EN 13468

## PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: yellow-grew material in a solid aggregate state.
- Melting point: 800 - 1100°C (mineral fibres)
- Flammability: pursuant to the tests required by European standards:  
 EN ISO 1182 (non-combustibility tests in a conical furnace),  
 EN ISO 1716 (determination of the heat of combustion),  
 EN 13823 (SBI test - *single burning item*).
- Concerning Euroclasses (reaction to fire classes) the product belongs to Euroclass A1. This means that the product is classified as non-combustible.
- Vapour pressure: <10-3mbar (25°C)

## PACKAGING

The products, die-cut or shaped according to customer specifications, can be packed in polythene bags or in cardboard boxes.