# Hereniodis insulation 



## Products in needled yellow glass wool felt

These product types are made from binder-free, white fibreglass felts. Their high density is assured by an effective mechanical needling system: the glass filaments assure high thermal performance. Depending on specific requirements, they can be coated on one or both sides with smooth aluminium or aluminium mesh, white or black glass cloth, glass veil and other materials on request.
Products made from needled felt are flexible, compact and have a very low level of dust emission; these features made them easier and more comfortable to handle. They enjoy long-term performance thanks to their completely inorganic origin. They are especially made to withstand considerable temperature changes.
They can be supplied with densities ranging from 60 to $180 \mathrm{~kg} / \mathrm{m} 3$, depending on thickness and design, in order to obtain a product with correct resistance to handling. Thicknesses can vary from 6 to 40 mm .
They are mainly used as heat insulation in the production of domestic and industrial ovens, as lagging for cisterns and tanks, as heat and sound insulation for exhaust pipes, and for other industrial purposes.

TECHNICAL PROPERTIES

| Feature | Value |  |  | measu | to rement | Standard |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reaction to fire | Euroclass A1 |  |  |  | - | EN 13501 |
| Melting temperature | $900{ }^{\circ} \mathrm{C}$ |  |  |  | ${ }^{\circ} \mathrm{C} \quad \mathrm{D}$ | DIN 4102/T17 |
| Working temperature | between 500 and $600{ }^{\circ} \mathrm{C}$ |  |  |  | ${ }^{\circ} \mathrm{C}$ | EN 14706 |
| Water vapour diffusion resistance ( $\mu$ ) | 1.4 |  |  |  | - | EN 12086 |
| Thermal conductivity ( $\boldsymbol{\lambda}$ ) at an average temperature of: | Density |  |  |  |  |  |
|  | 60kg/m3 | 80kg/m3 | $100 \mathrm{~kg} / \mathrm{m} 3$ |  | $130 \mathrm{~kg} / \mathrm{m} 3$ | $180 \mathrm{~kg} / \mathrm{m} 3$ |
| $150{ }^{\circ} \mathrm{C}$ | 0.050 W/m.K | 0.047 W/m.K | 0.043 W/m•K |  |  |  |
| $200{ }^{\circ} \mathrm{C}$ | 0.059 W/m.K | 0.055 W/m.K | 0.055 W/m.K |  | 0.062 W/m•K | K $0.043 \mathrm{~W} / \mathrm{m} \cdot \mathrm{K}$ |
| $250{ }^{\circ} \mathrm{C}$ | 0.070 W/m•K | 0.064 W/m.K | $0.063 \mathrm{~W} / \mathrm{m} \cdot \mathrm{K}$ |  |  |  |
| $300{ }^{\circ} \mathrm{C}$ |  |  |  |  | 0.076 W/m•K | - $0.057 \mathrm{~W} / \mathrm{m} \cdot \mathrm{K}$ |
| $400{ }^{\circ} \mathrm{C}$ |  |  |  |  | 0.087 W/m•K | - $0.074 \mathrm{~W} / \mathrm{m} \cdot \mathrm{K}$ |

## PHYSICAL AND CHEMICAL PROPERTIES

- Appearance: white material in a solid aggregate state.
- Specific temperature at which the physical state changes: softening point: littleton softening point (viscosity) 107.6 poises, approximately $850^{\circ} \mathrm{C}$
- Hazardous products of decomposition: none
- Flashpoint: irrelevant
- Flammability: irrelevant


## PACKAGING

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

