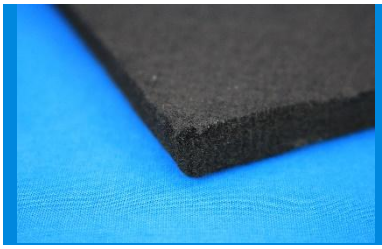
TECHNICAL DATASHEET

Version: 2 - 27.08.2025



4AC.017
Felt – Graphite – Untreated

Overview

Graphite is a mineral of elemental carbon (C) with a hexagonal crystalline structure. This soft and flexible material stands out with a black or grey-black colour. Carbon and graphite products are appreciated for their chemical and physical properties: chemical neutrality, heat resistance, thermal and electrical conductivity, low coefficient of thermal expansion, low coefficient of friction as well as low absorption coefficient of X-rays and electrons. A purified version of these graphite felts with a number of ashes under 20 ppm is available.

Technical Data

Properties	Unit	Value					
Material		Flexible graphite			Rigid graphite		
Ash	**ppm**	1,000					
Operating temperature (in inert atmosphere)	**°C**	2,000					
Density	**Kg/m³**	85 ± 5			170		
Basis weight	**g/m²**	500	1,000	1,500	5,100	6,800	8,500

	Thermal Conductivity (W/mK)	
Temperature	**Flexible graphite**	**Rigid graphite**
600 °C	0.08	0.25
800 °C	0.1	0.3
1,000 °C	0.12	0.38
1,200 °C	0.15	0.42
1,400 °C	0.2	0.5
1,600 °C	0.3	0.7
1,800 °C	0.4	0.9
2,000 °C	0.55	0.95

General Data

Material	Thermal resistivity	Mechanical strength	Chemical resistance
Graphite	★★★★★	★☆☆☆☆	★★★★☆ Except for alkali metals, fluorine and potassium

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Graphite felt

Applications

- Thermal insulation of vacuum furnaces and inert gas
- Degassing furnace
- Brazing furnace
- Annealing furnace
- Sintering furnace for metals
- Induction furnace
- Filter for hot or corrosive liquids and gas and molten metal
- Support for welding

Available felts

Thickness (mm) \ Density (Kg/m³)	85 ± 5	170
6	1TEX002707	
11.5	1TEX002706	
16	1TEX002704	
30		1TEX006474
40		1TEX006475
50		1TEX006476

The physical properties in this documentation are provided for informational purposes only and do not constitute a contractual commitment. Please contact our technical service if you require any additional information.