



Adhesive Backed Materials Ltd

ABM, Geith Ind Est, Crown Business Park, Tredegar, Gwent, UK. NP22 4EF
www.abmuk.net info@abmuk.net +44 (0) 1495 711895

Kaiflex ST

Technical Data Sheet

Product Description

Universal elastomeric foam insulation material suitable for use in busy public and commercial buildings. Based on synthetic rubber (Flexible Elastomeric Foam – FEF), closed cell structure, anthracite colour. Meets demanding international certified fire performance requirements. Reliably prevents condensation and reduces the risk of corrosion under the insulation. Provides additional protection against micro-organisms and mould. Fibre free – suitable for high hygiene requirements.

General Properties

Property	Value
Material type	Elastomeric foam based on synthetic rubber (FEF)
Cell structure	Closed cell
Colour	Anthracite
Max. service temperature	+85 °C
Min. service temperature	-50 °C (-200 °C – see Note 1)
pH value	7

Thermal Conductivity

Test method: DIN EN 12667

Thickness	Temperature	λ value
< 32 mm	-10 °C	0.032 W/(m·K)
< 32 mm	0 °C	0.033 W/(m·K)
< 32 mm	+10 °C	0.034 W/(m·K)
≥ 32 mm	-10 °C	0.035 W/(m·K)
≥ 32 mm	0 °C	0.036 W/(m·K)
≥ 32 mm	+10 °C	0.037 W/(m·K)

Water Vapour Permeability

Test method: DIN EN 12086

Thickness	Moisture Resistance Factor (μ)
< 32 mm	≥ 10,000 – no separate vapour barrier required
≥ 32 mm	≥ 7,000 – no separate vapour barrier required

Fire Performance



Adhesive Backed Materials Ltd

ABM, Geith Ind Est, Crown Business Park, Tredegar, Gwent, UK. NP22 4EF
www.abmuk.net info@abmuk.net +44 (0) 1495 711895

Characteristic	Rating / Standard
Euroclass (Note 2)	B-s3, d0 – DIN EN 13501-1
British Standard	Class O – UK Building Regulations
Surface spread of flame	Class 1 – BS 476-7
Fire propagation	Total spread index: <12, Sub-index 1: <6 – BS 476-6
Behaviour	Self-extinguishing, no drips

Resistance Properties

Property	Result / Standard
Corrosion resistance	Satisfies requirements – DIN 1988
Mould resistance	No growth – DIN EN ISO 846 Method A+C
Bacteria resistance	No growth – VDI 6022

Environmental & Health

Aspect	Details
Biocides	No biocides added
Fibres	Fibre free – suitable for high hygiene requirements
Heavy metals	Free from cadmium, lead and formaldehyde
VOC testing	Tested acc. to ISO 16000, Parts 3 & 6
Insulation material index	Acc. to AGI Q 132

Certifications & Approvals

Certification / Approval	Details
CE Marking	CE-compliant
UL Approval	UL94 V-0, HF-1
FM Approval	FM-approved
Marine Classification	DNV, Lloyd's Register
BG IAC	Gold inspected
Minergie-ECO	Base compliant



Adhesive Backed Materials Ltd

ABM, Geith Ind Est, Crown Business Park, Tredegar, Gwent, UK. NP22 4EF
www.abmuk.net info@abmuk.net +44 (0) 1495 711895

Benefits

Good Thermal Performance

- Low thermal conductivity ($\lambda \leq 0.033 \text{ W/m}\cdot\text{K}$ at 0°C) reduces energy loss and operating costs.

Good Moisture Resistance

- Closed-cell structure delivers a high-water vapour diffusion resistance factor ($\mu \geq 10,000$), minimising the risk of moisture ingress and insulation degradation.

Fire Safety Compliance

- Classified as Euroclass B-s3, d0 under EN 13501-1 and achieves Class 0 to UK Building Regulations, offering enhanced fire performance in public and commercial buildings.

Hygienic Properties

- Naturally fibre-free and dust-free, with built-in resistance to mould and microbial growth, supporting hygienic applications in sensitive environments such as healthcare facilities and food processing.

Ease of Installation

- Highly flexible, lightweight material simplifies cutting and fitting around complex pipework and duct configurations.

Applications

HVAC Systems

- Thermal insulation of chilled water pipes, air conditioning ducts, and ventilation systems to control condensation and energy loss.

Refrigeration Installations

- Suitable for insulating refrigerant lines in commercial and industrial refrigeration systems.

Industrial Process Pipework

- Protects process lines operating within a temperature range from approximately -50°C to $+85^\circ\text{C}$ (or higher, depending on product specification).

Public and Commercial Buildings

- Used in schools, hospitals, offices, and leisure facilities where strict fire and hygiene standards are required.



Adhesive Backed Materials Ltd

ABM, Geith Ind Est, Crown Business Park, Tredegar, Gwent, UK. NP22 4EF
www.abmuk.net info@abmuk.net +44 (0) 1495 711895

Shipbuilding and Offshore Installations

- Employed for thermal insulation in marine environments, offering corrosion protection and weight savings.

Supplied in a range of thicknesses from 3 mm to 20 mm, subject to availability of specific sizes.

We offer PVC Nitrile Foam Class 0, in full rolls of varying lengths. These rolls can be slit into different strip widths using our slitter or log cutter. Additionally, we can cut PVC Nitrile Foam Class 0 to sheet form. We can also supply the material in various shapes through die cutting or kiss cutting. Furthermore, other materials or adhesives can be laminated to the PVC Nitrile Foam Class 0 using our laminator. For more information or enquiries, please contact us.

Storage & Handling

Self-adhesive products must be installed within one year of manufacture. Store in a dry room at a typical relative humidity of 50–70% and room temperature of 0 °C to +35 °C. Protect against UV radiation outdoors – see Note 3.

Tolerances and dimensional limits satisfy requirements in accordance with EN 14304:2009+A1:2013.

Notes

Note 1: For temperatures below –50 °C please contact our Technical Support Team for advice.

Note 2: The Euroclass rating applies to metallic or solid mineral substrates.

Note 3: To protect against UV-induced deterioration this product must be painted using a suitable UV-resistant paint or covered with a UV-resistant cladding system within 1 day of being installed outdoors.

All information and recommendations about products are based on our existing knowledge and experience but do not mean a guarantee or warranty. As the products are used for different applications we recommend checking suitability of product prior to use. All information is subject to change without notice. End user is obliged to verify the above information before using the material.