SORBERFOAM™ NBR

flexible, elastomeric closed cell foam



Sorberfoam NBR is a closed cell synthetic rubber foam ideally suited for thermal insulation applications in rail and building industry. It has some of the highest fire classifications achieving R1 HL2 against EN45545-2 and Class B-s3, d0 against EN13501-1.

Low thermal conductivity values (K), make the product ideal for both heat and cold applications where temperatures can drop to as much as -165 deg C.

Closed cell structure and low permeability prevent formation of condensation in low temperature environments, in turn reducing chances of corrosion as well as development of mould and fungi.

Its high flexibility allows material to conform to uneven substrates.

With its primary function of saving energy, Sorberfoam NBR is also CFC and HCFC free resulting in positive impact on the environment. Being fiber free, it is also well suited to high air flow environments without potential of respiratory problems.

applications

- Rail HVAC systems
- Water storage tanks
- Hot/Cold water pipes
- Refrigeration piping

features

- Fiber free
- CFC and HCFC free
- High Flexibility
- Closed cell Insulation
- High classification to both Building and Transport fire standards
- Non conductive
- Available with adhesive backing

VOC, ODP, HEALTH AND SAFETY

Sorberfoam NBR is non-toxic and safe to handle by methods prescribed in the Safety Data Sheet.

SPECIFICATIONS

Colour	Black
Available	Standard sheet size: 1000 mm x 2000 mm 1500 mm x 2000 mm **Also available in rolls* Thickness range: 3 to 50 mm
	Custom sizes and thicknesses available depending on MOQ Available with: • Pressure-sensitive adhesive backing • Aluminium facing as Sorberfoam NBR ALU

PRODUCT SPECIFICATION

Standard Thickness (mm)	Density (kg/m^3)	Standard width (mm)	Thermal conductivity (W/mK)	Operating Temperature Range (deg C)
3	48-70	1000 / 1500	Thickness ≤ 25mm: 0.033 W/m.K @ 0 deg C, 0.035 @ 20 deg C Thickness > 25mm: 0.035 W/m.K @ 0 deg C, 0.038 @ 20 deg C	-165 to 85
6				
10				
13				
19				
25				
32				
40				
50				

MATERIAL PROPERTIES

Test method	Property	Report no.	Results
EN 13468	Corrosion Impact	-	pH Neutral (7)
EN 12086	Permeability	-	Thickness ≤ 25mm: ≥ 10000µ, Thickness > 25mm: ≥ 7000µ
EN13501-1	Fire Classification	-	B-s3, d0
EN45545-2:2020+A1:2023	Fire Classification	SL/Z-115/EN45545-R1/0147a/2025	R1, HL2
ASTM C209	Water Absorption	-	0.2% by volume
ASTM G21	Anti-Microbial	-	Pass

ADDITIONAL TECHNICAL PARAMETERS

- **Storage Conditions/Shelf life:** Store the material in a dry and clean environment at temperature between 0 °C and 35 °C and RH between 50% and 70%. Do not expose the material to heat or direct sunlight before installing. Tapes and self-adhesive sheets should not be kept in storage for more than one year.
- **Installation instructions:** For all adhesive materials it is important that the surface is clean, dry and free of grease, oil and solvents.

Technical data based on K-FLEX® ST.

Caveats: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic, mechanical and fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights.

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