

Foam for fire and sound insulation, available as panels, pyramids or round profiles

Application areas	<p>Flexible, open-pored, thermoset foam from the aminoplastic group, characterised by a filigree, spatially cross-linked structure of slender, easily deformable webs.</p> <p>Wisabax BS-foam thanks to its excellent properties, it is used in the following areas: building industry, industry, vehicle -manufacturing, engineering industry, building services, acoustic area, recording studios, textile and fashion industry.</p>
Product benefits	<ul style="list-style-type: none">▪ high sound absorbing capacity▪ good thermal insulation properties▪ flame retardant acc. to DIN 4102 - B1▪ burn rate <100 mm/min nach MVSS 302▪ high temperature resistance▪ low volume weight▪ ensures compliance with the joint dimensions▪ chemically neutral
Product benefits as round profile	<ul style="list-style-type: none">▪ prevents three flank adhesion▪ no outgassing in sealants▪ increased adhesive surface on the joint flanks due to round shape
Base	soft foam based on melamine resin, open-pored and absorbent
Density	ca. 8 - 11 kg/m ³
Water vapour diffusion	water vapour diffusion resistance coefficient μ = ca. 1 - 2 acc. to DIN 52615
Tensile strength	>0.12 N/mm ² (>120 kPa) (acc. to DIN 53571)
Breaking elongation	>10 % (acc. to DIN EN ISO 53571)
Compression hardness	ca. 6 - 20 kPa at 40 % deformation (acc. to DIN 53577)
Temperature resistance	from ca. -30 °C up to ca. +150 °C for a short time up to +200 °C
Thermal conductivity	<0.035 W/(m*K) (at 10 °C and d=50 mm, acc. to DIN 52612)
Fogging behaviour	>90 % (acc. to DIN 75210, process A) <0.5 mg (acc. to DIN 75210, process B)
Length-specific flow resistance	8 - 20 kNs/m ⁴ (acc. to DIN EN 29053)

Fire behaviour by country

Germany	flame retardant acc. to DIN 4102 - B1
Austria	B1, TR1, Q1 acc. to Önorm (Austrian Standards International) B 3800
France	M1 acc. to NF P 92-501
Italy	cat. I acc. to CSE RF 2/75/A
Great Britain	class 0 acc. to BS 476, part 6/7

European standard (DIN EN 13501):	material thickness 15 mm: class B, s1, d0
	material thickness 20 mm: class C, s1, d0
	material thickness 30 mm: class C, s1, d0
	material thickness 40 mm: class C, s2, d0

Fire behaviour in vehicle technology

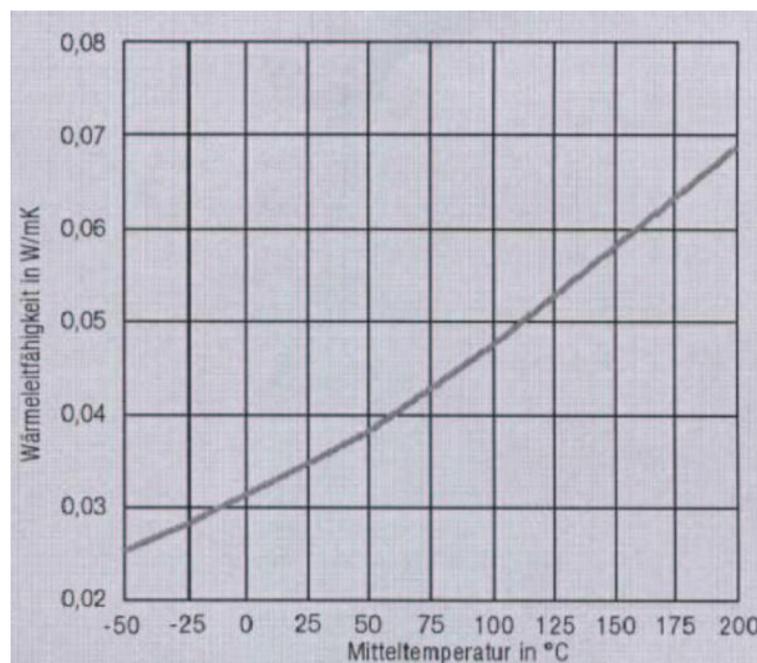
Rail vehicle	S4, SR2, ST2 acc. to DIN 54837, DIN 5510
Road traffic	meets the requirements of FMVSS 302
Smoke emission	meets the requirements of ASTM E662-83 and ABD 0031ATS 1000.001
Cargo hold equipment	meets the requirements of a-1 acc. to FAR 25.855

Conclusive statements regarding the fire behaviour of joints can only be made by testing the entire element.

Fire behaviour in electrical engineering

Fire behaviour of plastics: 94 V-O, 94 HF-1 acc. to UL 94

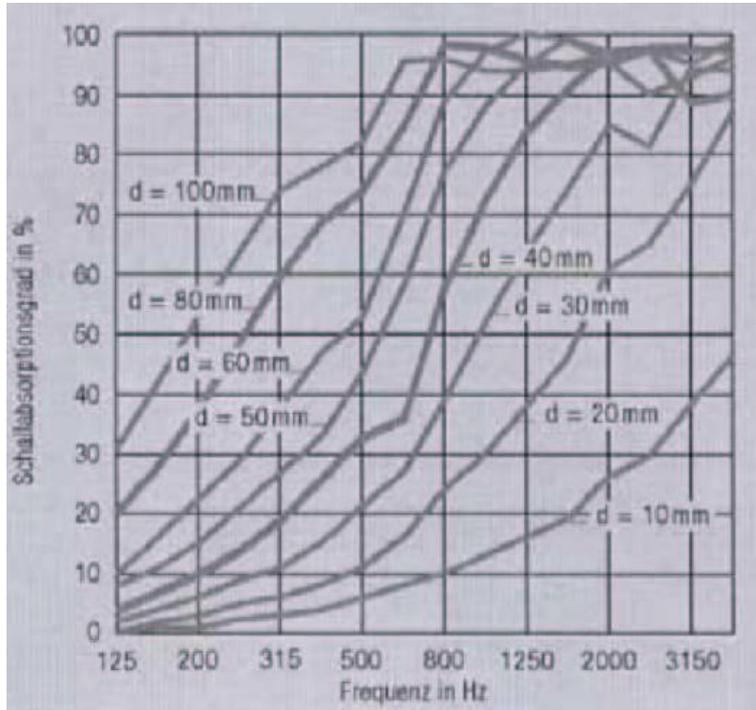
Thermal conductivity



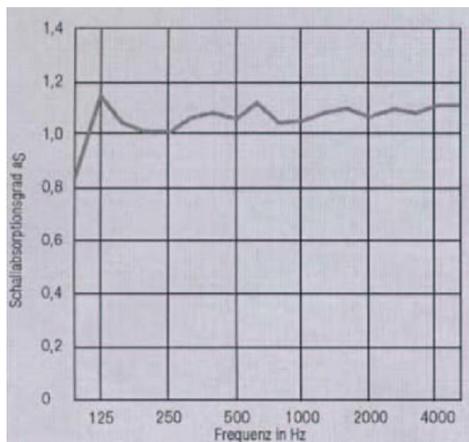
depending on joint dimensions, substrate, temperature and moisture

Sound insulation

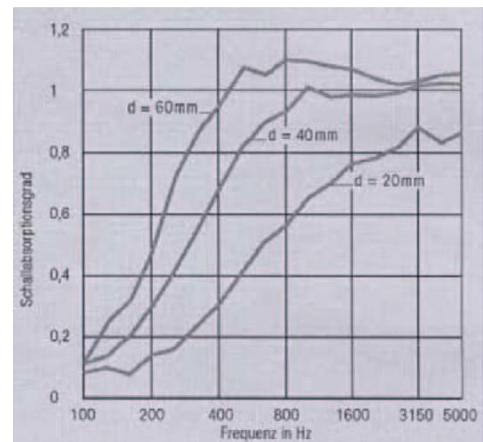
Sound absorption varies with layer thickness, being strongest in high/mid frequency and modest in lowfrequency applications, as shown in the graphs below.



Acoustical absorption acc. to DIN 52215 (inclined sound incidence)



Absorption behaviour of the broadband absorber in laboratory tests



Acoustical absorption acc. to DIN 52212 (all-round sound incidence) for different layer thicknesses

Chemical resistance

BS foam is unstable or only partially resistant in the long term. In contrast, the Wisabax BS foam was found to be resistant to all of the other chemical products tested. The basis for this evaluation was the compression set according to DIN 53572 after 7 days of storage in liquid at room temperature according to DIN 53428.

Chemicals group	Chemical substance	Concentration	Assessment*
Leaching	ammonia water	25 %	-
	Natronlauge	50 %	0
Acids	lactic acid	5 %	0
	citric acid	5 %	-
	hydrochloric acid	10 %	-
	nitric acid	10 %	-
	sulphuric acid	10%	-
	phosphoric acid	50 %	-
	acetic acids	90 %	0
	formic acid	90 %	-
Hydrocarbons	light petrol (60 -140 °C)		+
	petroleum naphtha (155 -185 °C)		+
	paraffin oil		+
	methylene chloride		+
	totuol		+
Alcohols	methanol		+
	ethanol		+
	isopropanol		+
	butanol		+
	glycol monoethyl ether		+
	glycerin		+
Miscellaneous	distilled water	3.6 %	0
	marine water (NaCl solution)		0
	butyl acetate		+
	acetone		+
	diethyl ether		+

- * **Assessment**
- + resistant
- limited resistant
- 0 not resistant

Colour

grey
white upon request

**Item no.+ Delivery form
as pyramids**

Item no.	Length	Width	Height	PU
BSP-PG 1000x500x50	1000 mm	500 mm	50 mm	18 panels

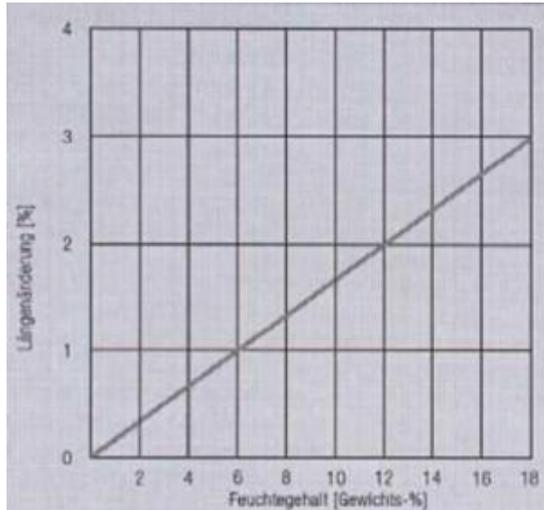


Other options are possible with pre-order and appropriate quantities.

Item no. + Delivery form
as round profile

Item no.	Diameter	Packing unit
BSR 1810.1000	10 mm	1500 m (rods of 1 m)
BSR 1820.500	20 mm	500 m (rods of 1 m)
BSR 1830.200	30 mm	250 m (rods of 1 m)
BSR 1840.100	40 mm	150 m (rods of 1 m)

Processing



Length variation as a
function of moisture
content

Note !

When working, e.g. when
sawing or milling, extract
the dust produced directly
at the cutting point and
wear a dust mask.

Due to the sorption behaviour of the melamine resin in conjunction with the open-cell nature of the foam, the moisture content of the material changes depending on the ambient conditions.

It is associated with dimensional changes, similar to wood, concrete or clay tiles. This behaviour has to be taken into account in the processing of the material. The foam parts, packaged as delivered, must be unpacked and stored for at least 3 - 5 days prior to processing in climatic conditions corresponding to the later intended use.

Further information



More information about this product (current technical data sheet, safety data sheet, certificates, product variants, etc.) can be found via the adjacent QR code.

Shelf life

The product has an almost unlimited shelf life and is functional.

Recommendation: In closed original packaging, protected from direct sunlight and stored in a dry place between +15 °C and +25 °C.

Observe: All information is based on careful examinations in the labs and our previous practical experience. They are non-committal notes. Due to the many materials that are marketed and the different processing methods, which we cannot influence, we can, of course, not assume any warranty, including under patent-law, for the result of your work. We recommend performing sufficient own tests to find out if the product meets the respective requirements. In addition, we refer to our terms and conditions of sale, delivery and payment, available at www.wisabax.ch/agb.html. © Wisabax AG - This technical data sheet replaces all older versions.

Have you noticed an unclear formulation or an error? Thank you for your feedback. In case of doubt, the German version of the technical data sheet applies.