

One-component polyurethane foam with a fire resistance of up to 180 minutes in accordance with EN 1366-4, flame-retardant class B1 in accordance with DIN 4102-1

Application areas

Fire-retardant 1-component installation foam for professional one-handed application with a standard foam gun. The product is used in a variety of ways for filling, mounting, insulating and damming:

- for preventive fire protection in construction and in the industry; verhindert die Ausbreitung von Feuer, Rauch und giftigen Gasen
- for filling and sealing cavities and joints, especially on fire protection walls
- in the installation of windows and doors to fill the cavities between the frame and masonry
- for pipe and cable penetrations through walls, floors and ceilings
- for special applications
- ideal for fire protection applications, window manufacture, assemblers, handicraft

Product benefits



- impermeable to fire and fire gases up to 180 min (see test reports)
- flame retardant B1 acc. to DIN 4102-1
- good sound insulation from ca. 60 dB
- good thermal insulation (thermally insulating)
- good adhesive strength
- high volume yield through low foam density
- precise, one-handed dosing option using a foam gun
- tack-free after ca. 10 - 12 min
- cuttable from ca. 20 - 40 min
- good temperature resistance
- good tensile, compressive and shear strength
- excellent dimensional stability
- fulfils GEV-Emicode EC 1 Plus
- outstanding adhesion to masonry (bricking), beton, plastering, stone, fibre cement, wood, metal and many other materials widely used in construction like polystyrene foam (Styropor), hard polyurethane foam, polyester or PVC-hard

Base

1C polyurethane; cross-linking is chemically neutral with air humidity. The product has no nutritional value for insects or other animals and is a poor substrate for fungal growth.

Restrictions

Not suitable for PE, PP, PC, PMMA, PTFE (Teflon[®]), glass, silicone, bitumen and wax-containing substrates, permanent water loading, use in cavities with insufficient moisture.
Not UV-resistant (unless the PUR foam is painted over or covered)!

Cleaning agents

Wisaclean R 216 for cleaning non-absorbent adhesive surfaces and fresh product residues. Wisapur-MS spray cleaner for cleaning the foam gun. The cured product can normally only be removed mechanically. To wash your hands, please use water and soap.

Preventive fire protection

Wisapur MS fire protection foam has been subjected to extensive testing using a standard heating curve in accordance with EN 1366-4, version 2006+A1:2010. Furthermore, this product fulfils tests based on EN 15882-4:2012 and EN 13501-2:2007+A1:2009 and EN 13501-2:2016. Before use, please refer to the following test instructions or detailed test reports (available on request) to ensure that the required fire resistance is achieved.

Deviations from this arrangement can have a negative effect on the fire resistance. This applies in particular to wider joints, joints that are less deep than specified or joints on other materials. Quantitative statements for modified arrangement types can only be made by examining the entire element.

Processing

The bonding surfaces must be sound and free of dust and grease. If necessary, repair defective substrates beforehand. Surfaces and fresh PUR foam should be cleaned with Wisaclean R 216.

Low humidity and low temperatures lead to slower curing of the foam. Moisten (spray) surfaces with water before foaming.

Depending on the gun adapter (observe manufacturer's instructions), it may be worth greasing the gun lightly with vaseline or Teflon spray to prevent sticking.

Shake can vigorously before each use. Screw the can onto the foam gun and press the trigger for approx. 10 s so that the gun is filled with material and free of air. Use the trigger lever or dosing screw to set the discharge quantity. Hold can with valve pointing downwards during use!

Fill joint to ca. 70 % (post-expansion). After use, secure the foam gun with the dosing screw so that no foam can escape. Always leave a (partially) filled foam can on the gun, otherwise there is a risk that the gun will become irreversibly clogged. Always replace empty foam cans immediately.

When changing the can, carefully unscrew the empty can and pull the trigger at the same time to allow the gas to escape.

Important during can changeover: Replace the empty can immediately (within 1 - 2 min) with a new can and then pull the trigger of the gun for approx. 10 s to refill the gun with material !!!!

Abbreviations

Test results of Wisapur-MS fire retardant foam	
MSB	Wisapur-MS fire protection foam (item no.MSB 901.750.12)
E	Criterion integrity (integrity of the joint, important for impermeability to flame/heat)
F	Splice applied in the field (sealant must first be grouted and fully cured)
I	Criterion Insulation (important for impermeability to toxic fumes)
T	Horizontal application in a vertical wall
V	vertical application in a vertical wall (suitability for vertical joints)
W	Permitted width range in mm (permitted joint width in millimetres as lower and upper limit)
X	No movement applied (tested without movement, i.e. max. 7.5 % total movement absorption permitted)

Vertical, linear joints
Stone / Stone

Entire joint depth filled with MSB	
Wall thickness ≥ 100 mm (wood / wood)	Wall thickness ≥ 115 mm (wood / wood)
EI 45 – V – X – F – W 10 bis 30	EI 45 – V – X – F – W 20 bis 30
EI 60 – V – X – F – W 8 bis 10	EI 60 – V – X – F – W 8 bis 20
EI 90 – V – X – F – W8	EI 120 – V – X – F – W8

Vertical, linear joints
Stone / Wood

Entire joint depth filled with MSB
Wall thickness ≥ 100 mm (stone / wood)
EI 120 – V – X – F – W 8 bis 20

Horizontal, linear joints
Stone / Wood

Wall thickness ≥ 100 mm (stone / wood)
EI 90 – T – X – F – W 8 bis 20

Vertical, linear joints
Stone / Wood
(with mineral wool and
fire protection foam)

Wall thickness ≥ 200 mm (wood / wood)
The side facing the fire was filled 100 mm deep with compressed rock wool; the side facing away from the fire was foamed 100 mm deep with MSB.
EI 180 – V – X – F – W 10 bis 50 (The value is only valid in the direction of the flame)

More test arrangements or even better values required This product was also tested in combination with the Wikoplast-BHW fire protection hybrid; see PEUTZ test report «Summary of fire resistance tests: Wisapur MS fire protection foam between stone to stone and stone to wood».

Explanations on the authorised building materials

Stone	The term «stone» refers to beton, aerated concrete (class G4 / 600 or thicker), lime stone, block stone and masonry (bricking).
Wood	The wood extends through the entire wall thickness (or at least the specified wall thickness).

Maintenance / Prolonged non-use Once the product in the gun has hardened, the gun is unusable. Therefore, if the gun is not used for a longer period of time or if it no longer works well, screw on PU foam cleaner (can) and spray the gun thoroughly to clean the inside.

Density ca. 15 - 20 kg/m³ (corresponds to ca. 40 - 45 litres of finished foam, may vary depending on conditions)

Tack-free time (TFT) from ca. 10 - 12 min (depending on application quantity, temperature and humidity)

Cuttability time from ca. 20 - 40 min (depending on application quantity, temperature and humidity) firm

Curing time ab 80 - 100 min (depending on application quantity, temperature and humidity even longer, up to 24 h)
If necessary, fill larger cavities in layers of ca. 4 cm.
Wait about 15 - 30 min. between applications.
The surfaces to be bonded should be lightly moistened with water before each application.

Total foam yield ca. 40 - 45 l (acc. to EN 17333-1)

Dimensional stability -5 % < dimensional stability < 0 %

Cell structure Partially open-pored, the foam absorbs some water / moisture.

Thermal conductivity ca. 30 - 35 W/(m*K)


Sound insulation ca. 60 dB acc. to DIN 12354-3 (Joint Sound Insulation)

Operating temperature from +5 °C up to +35 °C (optimum material temperature 20 °C)

Min. temperature Substrate: from +5 °C
Material (tin can): from +5 °C up to +30 °C (optimal from +18 °C up to +25 °C)
If necessary, temper the can in a bucket of lukewarm water before use.

Temperature resistance cured foam from -40 °C up to +90 °C
for a short time up to +140 °C

Frost resistance up to -15 °C (during transport)

Repairing	can be repaired with the same material
Substrates	Beton, stone, plaster, compact masonry, mortar, wood, wood-based materials, metal, PVC-hard, polystyrene foam (EPS/XPS), hard polyurethane foam, polyester, epoxy, many thermoplastics and duroplastic plastics (except PE and PP) and many other materials. For other surfaces, own tests are required.
Certificates / Norms	<ul style="list-style-type: none">▪ PEUTZ test report «Summary of fire resistance tests: Wisapur MS fire protection foam between stone and stone and between stone and wood»▪ PEUTZ fire protection test reports for Wikoplast-BHW fire protection hybrid sealant▪ Building material class B1 (Fire behaviour acc. to DIN 4102 - part 1); only valid between solid mineral or metallic building materials and for joints up to 40 mm wide▪ GEV-EMICODE EC 1 Plus
Further information	 You can find more information about this product (link to the product on our homepage, safety data sheet, certificates, special enquiries etc.) under the adjacent ISOPIN QR code.
Item no. + Colour	MSB 901.750.12 rosa - dose à 750 ml
Delivery form	carton box of 12 doses à 750 ml
Shelf life	In closed original packaging, protected from direct sunlight and stored in a dry place between +15 °C and +25 °C, the official shelf life is 18 months from date of production (the printed expiry date is decisive). Always store cans upright, otherwise the valves will clog!
Accessories	MS 905.500 MS 905.500 Wisapur-MS Spray-Cleaner foam gun cleaner à 500 ml

Safety and disposal: Familiarise yourself with the valid Safety Data Sheets (SDS) for the products used. All applicable safety regulations and disposal instructions must be observed.

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.