

# Sakret BK FOAM 0°C / Foam adhesive for fixing insulation boards

Ready for use polyurethane adhesive for fixation (fastening) of foam polystyrene plates on facades and foundations. Higher adhesion strength, easy usage, less consumption and higher productivity in comparison with cement adhesives. Excellent heat insulation features / prevents formation of frost bridges. Low coefficient of expansion. For usage in heat insulation systems as additional material.



### **Properties:**

- ✓ Powerful adhesion of polystyrene heat panels (XPS and EPS).
- ✓ Instant adhesion and wall plugging within two hours.
- ✓ More economical. Ready to use in aerosol can.
- ✓ Up to 9  $m^2$  heat insulation panel adhesion for each can.
- ✓ Minimum expansion during drying period.
- ✓ After dried, no further expansion and shrinkage.
- ✓ A lighter material compared to plaster, alternative material, used in heat insulation systems.
- ✓ No more extra burden or weight to building.
- ✓ High yield up to 45 litres, depending on the humidity and temperature.
- ✓ Fire Class: E (According to EN 13501-1. It refers to B2 for DIN 4102).
- ✓ Usable at low temperature like 0°C
- ✓ It does not contain any propellant gases which are harmful to the ozone layer.

#### **Application:**

- ✓ Polyurethane adhesive for fixation of polystyrene plates (EPS, XPS) on new buildings and renovated buildings as well as for fixation and insulation of other materials. Best for mounting heat insulation panels and filling voids during adhesive application.
- ✓ For fixation of foam polystyrene plates on external walls and plinths as well as filling of joints in between foam polystyrene plates.
- ✓ Can be used in SAKRET heat insulation system's modernisation (SanReMo) –
  heat insulation on heat insulation, if heat steadiness improvement is needed.
  SAKRET BK-Foam can be used for material adhesion to the following surfaces:
  mineral foundations (concrete, ceramic bricks, blocks, masonry etc.), foam
  polystyrene (EPS, XPS), mineral wool, wood, OSB plates, gyps cardboard,
  bitumen dispersion hydro insulation, galvanized metal and aluminium plates.
- ✓ Applications needed minimum expansion.



#### **Technical specification:**

Property	Value
Storage period	12 month
Tack free time (1ck width)	6 +/- 2 min
Cutting time (1 cm width)	20-45 min
Cure-Time	24 hours
Foam color	Light pink
Adhesion to EPS*	0.033 N/mm <sup>2</sup>
Adhesion to XPS**	0.039 N/mm <sup>2</sup>
Density	22 +/- 3 kg/m <sup>3</sup>
Yield	30-45 L
Yield metric	=~ 9 m <sup>2</sup>
Elongation at break	13.6%
Fire class of cured foam	B2, E (DIN 4102 – 1) (EN 135-1-1)
Valuras in susses	50/
Volume increase	5%
Compression Strength	0,03 MPa
Flash point of cured foam	400°C
Tensile strength	12.1 (BS 5241) N/cm <sup>2</sup>
Compressive strength at 10% deformation	4 (DIN 53421) N/cm <sup>2</sup>
Point thermal conductivity	0.03 W/m x K
Sound reduction index	RST, w = 60 dB
Temperature resistance	-40 °C to +100 °C
Application Temperature	0°C to +30 °C

<sup>\*</sup>EPS – Expanded Polystyrene

The above parameters measured conditions at + 23  $^{\circ}$ C and 50% relative humidity unless otherwise stated.

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## Foundation preparation:

- ✓ Foundation must be firm without cracks.
- ✓ Foundation must be cleaned from less enduring and/or separable layers (for example dirt, dust, oil, paint leftovers etc.);
- ✓ Hollow plasters must be forged off and replaced with respective SAKRET finishing materials.
- ✓ To provide maximum adhesion before BK-FOAM application it is recommended to make adhesion test of the facade finishing layers (existing plastering and paint layers).
- ✓ Paint layers with low adhesion must be taken off thoroughly.
- ✓ Surfaces with algae and moss must be processed with anti-fungus agent SAKRETER
- ✓ Working in low temperature conditions, the surface must not be covered with hoarfrost, ice and snow.

<sup>\*\*</sup>XPS - Extruded Polystyrene





Figure-1

## **Processing:**

- ✓ Put on protective gloves. Shake balloon carefully (10-12 sec.), holding exhaust valve downwards. Connect aerosol balloon with foam pistol. During work keep holding exhaust valve downwards.
- ✓ Before adhesion of foam polystyrene plates on external walls of the building, it is necessary to mount SAKRET aluminium plinth edge or alternative plinth profile ALB-EB-PVC-20
- ✓ In thermal insulation system 2-3 cm wide BK-Foam adhesive bars shall be applied on insulation plate, parallel to all edges of the plate (3 cm from the edge) and one adhesive bar in the middle of the plate, parallel to the longest edge (distance between adhesive bars ~25 cm).
- ✓ Insulating foundations of a building five vertical, 2-3 cm wide adhesive bars shall be applied parallel to the plate's shortest edge, observing 2-3 cm distance from the edge of the plate.
- ✓ In insulation of basement ceiling or balcony ceiling use support until adhesive has fully hardened.
- ✓ After adhesive is applied, within 5 minutes the plate must be put to the wall, pushed a little, using long trapeze ruler.
- ✓ The level of the foam polystyrene plate's surface can be adjusted within 15 minutes. In case work is carried out in unfavourable weather conditions (strong wind or rainfall), SAKRET protective mesh SN90 or film must be used obligatory on operating platform.

#### Additional recommendations:

✓ Fresh adhesive daubs as well as the nozzle of the applicator (in case of work interruption for more than 15 minutes) must be cleaned with polyurethane foam cleaner or acetone.



- ✓ <u>CAUTION!</u> Cleaning means on foam polystyrene plates may cause its damages. Hardened layers can be taken off only mechanically. Hardened foam must be kept away from ultraviolet beams.
- ✓ Productivity of adhesive depends on different factors: air, surface and packing temperature, air humidity and distance between foam polystyrene and wall surface, as well as from smoothness of the surface. When processing material in lower temperatures, correction time becomes longer.
- ✓ Open packing shall be used within one week. Product does not form link with polythene, polypropylene, polyamide, silicone and Teflon.

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#### Storage:

- ✓ Must be stored in closed packing, 12 months since production date, ensuring that product is kept in original packing, in vertical position (exhaustion valve upwards), in dry place, from +5°C till +30°C. Storage in temperature >30°C shortens validity term of the product and influences its parameters. Storage time in low temperature (≤-5°C) can be no longer than 7 days.
- ✓ Should be stored and transported in vertical position.
- ✓ Should be kept in room temperature for at least 12 hours before the application.
- ✓ Storage in temperature above +30°C or near open fire is prohibited. Wrong storage may cause balloon's nozzle's operation disturbance. It is prohibited to press or pierce full/used packing of adhesive. It is prohibited to store product in passengers' compartment of vehicles. Must be transported only in luggage compartment. Keep away from direct sun beams!
- ✓ Cured foam will discolour if exposed to ultraviolet light.
- ✓ Paint or coat the cured foam for best results in outdoor applications.
- ✓ Dried foam can be wiped out by mechanical force.
- ✓ Lower temperatures decreases yield and curing time.

### Safety conditions:

- ✓ Contains Diphenylmethane-4, 4-Diisocyanate
- ✓ Irritating to eyes, respiratory system and skin.
- ✓ Do not breathe spray!
- ✓ Allergic reaction can be caused to persons that are sensitive against diisocyanates. Persons with asthma, eczema or skin diseases shall avoid contact with this product, including contact with skin.
- ✓ Harmful by inhalation.
- ✓ Protective mask with appropriate gas filter shall be used working in weakly ventilated premises (standard EN 14387, A1 type filter).
- ✓ Use only in well-ventilated areas.
- ✓ Keep away from direct sunlight and do not expose temperatures over 50°C.
- ✓ Do not pierce or burn, even after use.



- ✓ Keep away from sources of ignition, no smoking.
- ✓ Keep out of the reach of children

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### **Technical data:**

- ✓ Usage temperature from 0°C till +30°C.
- ✓ Balloon's temperature during work 0°C till +30°C, optimal can temp. +20°C.

## **Consumption:**

 $\checkmark$  For heat insulation of external walls and ceiling 7-10 m<sup>2</sup>, fixation of heat insulation plates for foundations 10-14 m<sup>2</sup>.