



# PC-Confoam® B1

High-innovative component, self-expanding, ready-to-use polyurethane foam

PC-Confoam® B1 PU Gun Foam is a top-quality heat and sound insulation foam at buildings and houses. Provides a unique, monolithic thermal insulation application without junctures, seams, and gaps. An innovative alternative to traditional building insulation methods such as polystyrene heat insulation boards, glass wool, and rock wool. Single-component product used with an applicator gun. It does not contain any propellant gases which are harmful to the ozone layer.

## PROPERTIES & FEATURES

- Demonstrates exceptional adhesion to diverse building materials.
- Facilitates application on irregular or inaccessible surfaces where conventional insulation materials are impractical.
- Mitigates thermal bridging and dew point issues.
- Provides coverage for up to 3m<sup>2</sup> with a 1.5cm thickness per layer when applied from approximately 40cm at a standard pace.
- Eliminates the need for additional mechanical fastening components after application.
- Allows for post-application painting.

## FIELDS OF APPLICATION

- Roofs, attics, facades, foundations, basements, floors, interior walls, inter-floor overlaps, interior partitions, ceilings, and cellars.
- Structural elements of buildings, balconies, loggias, doors, window sills, pipes, ducts, and various surfaces such as cylindrical, uneven, and rough textures.
- Exterior surfaces of vehicles including car bodies, trailers, boats, yachts, ships, and other marine vessels.

## PRODUCTS INFORMATION

Packaging	850 ml
Shelf Life	36 months
Transportation Conditions	Transport in a dry place in +5°C and +30°C
Storage Conditions	Store in cool and dry conditions between +5°C and +30°C

### NOTE:

The foam maintains its usability for up to 36 months from the manufacturing date when stored in its original packaging, in a vertical position (valve facing upwards), within a dry environment with temperatures between +5°C and +30°C. Deviating from this temperature range, either above +30°C or below +5°C, will diminish the shelf life and affect the product's characteristics. It is imperative to refrain from storing the foam cans in temperatures surpassing +50°C or in close proximity to open flames, as this may compromise their integrity. Improper storage orientations could result in valve blockages.

## TECHNICAL DATA

Foam	Method / Conditions	Value
Basis	-----	Polyurethane Prepolymer
Curing Mechanism	Moisture cure	
Full Cure Time	-----	24 hours
Foam Color	-----	Yellowish
Yield	-----	3m <sup>2</sup> for 1.5 cm thickness
Thermal Conductivity	DIN 52612 - TM 1020 : 2016*	0.025 W/m.K
Compression Strength	DIN 53421 - TM 1011 : 2013*	0.03 MPa
Dimensional Stability	ISO2796/86 - TM 1004 : 2013*	±10%
Acoustic Insulation	EN ISO 717-1	50db at 1600hz
Tack-Free Time	ASTM C1620 - TM 1014 : 2013*	5±2 min
Cutting time	ASTM C1620 - TM 1005 : 2013*	≤40 min
Can/Applicator Temperature	Optimal 20°C	Between +5°C and +30°C
Temperature Resistance	Cured Foam	Between -75°C and +115°C
Application Temperature	Ambient and surface	Between +5°C and +30°C

## USES

### SURFACE CLEANING:

Substrates should meet high-quality standards, ensuring they are clean, dry, and devoid of dust, grease, rust, or any other impurities that could compromise adhesion. To prime the surface, lightly moisten it with water, using a gardening sprinkler, for example, at a temperature exceeding 0°C.

### PRODUCT PREPARATION:

If the can's temperature is too cold or hot, normalize it by immersing it in cold or warm water, or by allowing it to equilibrate at room temperature for a minimum of 24 hours. The optimal can temperature is +20°C.



### PRODUCT PREPARATION:

Put on protective gloves. Shake the can well before use. Each can have two special plastic nozzles for spraying to the wall and ceiling (See Picture 1). Nozzle A is for vertical surface applications and Nozzle B is for ceiling applications. Screw desired nozzle to the gun. Screw the can onto the applicator. Hold the can upside down and activate the foam by pressing the valve. Always handle the canister with the valve pointing downwards. Spray the foam 30-45cm distance from the wall or ceiling for applications. The product can be applied at any desired thickness as long as it is applied layer by layer. The thicker, the higher the insulation value. For an effective insulation value, the recommended application thickness is 5 cm and should be reached to this thickness with a minimum of 3 layers. It is not possible to get the ideal insulation value with 1 or 2 layers. Moisturizing the surfaces and the foam improves adhesion and shortens curing time. Vertical gaps should be filled with foam starting at the bottom and moving up. Do not fill the entire gap - the foam will increase in volume.

### TOOLING AND FINISHING:

Once the foam is completely hardened, shield it from UV exposure by using protective coatings like plaster or paint. To prevent the foam from curing inside the applicator, it is advised by the manufacturer to use the entire can without pausing for more than 5 minutes between sprays.

### CLEANING:

Fresh foam should be cleaned using pc-wc Foam Cleaner, whereas mechanical cleaning may be necessary for cured foam.



Picture 1: Nozzle A on the left and Nozzle B on the right.

### REMARKS & RESTRICTIONS

- The curing process of the foam is susceptible to variations in temperature and humidity. Should the ambient temperature dip below the specified minimum within 24 hours post-application, it may compromise the seal's quality and precision.
- Hastily administering the initial treatment can induce lasting alterations in the foam's structure, stability, and performance characteristics.
- The choice and state of the applicator wielded can significantly influence the final attributes of the product.
- It is advisable to refrain from applying foam in inadequately ventilated or sunlit areas lacking sufficient fresh air circulation.
- To optimize efficiency, ensure the foam is dispensed with the valve oriented downwards.
- Once cured, the foam may exhibit a color change upon exposure to ultraviolet light; consider applying paint or a protective coating for outdoor applications.
- Lower temperatures can lead to decreased yield and prolonged curing times.

### SAFETY

Containing Diphenylmethane-4, 4'-Diisocyanate, this product poses risks if inhaled and may cause irritation to the eyes, respiratory system, and skin. It is advisable to avoid inhalation of the spray/vapor, use appropriate protective clothing and gloves, and limit usage to well-ventilated areas. As the product is stored in a pressurized container, it should be kept away from direct sunlight and temperatures exceeding 50°C. Refrain from puncturing or burning the container, even after use, and ensure it is stored away from potential ignition sources, including refraining from smoking. Additionally, store the product out of the reach of children.



### PC-WC GLOBAL FZ-LLC

Compass Building, Al Shohada Road Al-Hamra Industrial Zone-FZ,  
Ras Al-Khaimah, UAE  
Email : [info@pc-wc.com](mailto:info@pc-wc.com)  
Phone +971542455817 , [www.pc-wc.com](http://www.pc-wc.com)

TECHNICAL DATA SHEET UPDATED IN  
SEPTEMBER 2020  
TDS/PC-CONFOAM® B2/20

All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

The information, particularly the recommendations relating to the application and end-use of PC-WC products, are given in good faith based on PC-WC's current knowledge and experience of the products when properly stored, handled and applied under normal conditions by PC-WC recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or any other advice offered. The user must test the product's suitability for the intended application and purpose. PC-WC Global FZ-LLC reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our [website www.pc-wc.com](http://www.pc-wc.com)