



Technical Data Sheet

BC 805P

One-Component, Moisture-Curing Polyurethane Foam Insulation & Sealant

1) Product Description

BC 805P is a single-component, moisture-curing polyurethane foam supplied in pre-pressurized aerosol cans. Upon dispensing, the foam reacts with atmospheric moisture to expand and cure into a semi-rigid, closed-cell structure.

It provides excellent thermal insulation, soundproofing, and air sealing properties, making it ideal for general construction, HVAC, and finishing applications.

2) Key Features & Benefits

- Ready-to-use, one-component formulation
- Expands 2–3 times its original volume
- Excellent adhesion to concrete, masonry, wood, and metals
- Closed-cell structure ensures superior thermal and moisture insulation
- Tack-free in 5–10 minutes, fully cured within 12–24 hours
- Resistant to heat, cold, and aging
- Free of CFCs and HCFCs — environmentally friendly

3) Typical Applications

BC 805P is suitable for a wide range of insulation and sealing applications, including:

- Filling and sealing around door and window frames
- Gaps between walls, floors, and ceilings
- Utility and pipe penetrations through walls or slabs
- Joints between precast concrete panels
- Sill plates, corner joints, and small cavities
- General-purpose gap filling and insulation



4) Technical Properties

Property	Test Method	Typical Value
Foam Type	–	Moisture-curing polyurethane
Color	–	Light Yellow
Appearance (Cured)	–	Semi-rigid, closed-cell foam
Density	ASTM D1622	19–22 kg/m ³
Compressive Strength (10% deformation)	ASTM D1621	≥110 kPa
Tensile Strength	ASTM D1623	≥180 kPa
Adhesion to Concrete	Internal Test	Excellent (>100 kPa)
Thermal Conductivity (λ)	ASTM C518	0.035 W/m·K
Sound Reduction Index (R_a)	ISO 717-1	58 dB
Service Temperature Range	–	-40°C to +90°C (short-term +100°C)
Tack-Free Time	–	~5–10 minutes
Full Cure (25°C / 50% RH)	–	12–24 hours
Expansion Rate	–	2–3× original volume
Water Absorption (Volume)	EN 1609	<1%
Fire Resistance	ASTM E84	Class B3



5). Application Instructions

1. Preparation:

Ensure surfaces are clean, sound, and free from dust, oil, and grease. Slightly moisten surfaces with clean water to enhance adhesion and curing.

2. Application:

Shake the can vigorously for at least 30–60 seconds before use.

Attach the straw adapter or gun.

Hold the can upside down during application and fill gaps partially (foam expands after dispensing).

3. Curing:

Foam becomes tack-free within 5–10 minutes and can be cut after 30–45 minutes.

Full cure is achieved within 12–24 hours depending on temperature and humidity.

4. Finishing:

Trim excess foam with a knife once cured.

Protect cured foam from UV radiation by painting or coating.

6). Packaging

Packaging Type	Net Content	Carton Quantity
Aerosol Can	750 ml	12 cans/carton

7). Storage & Shelf Life

- Store in a cool, dry place at temperatures between +5°C and +25°C.
- Protect from direct sunlight, open flame, and heat sources (>49°C).
- Store cans in an upright position.
- Shelf life: 18 months (unopened, under recommended storage conditions).



8) Limitations

- Not suitable for structural bonding or high-movement joints
- Do not apply on polyethylene (PE), polypropylene (PP), PTFE (Teflon), or silicone surfaces
- Not UV stable – must be covered or painted after curing
- Do not expose uncured foam to open flames, sparks, or direct sunlight
- Store and apply at room temperature (20–25°C) for best yield

9) Health & Safety

- Contains Diphenylmethane-4,4'-Diisocyanate (MDI)
- Harmful if inhaled; may cause irritation to eyes, skin, and respiratory system
- Use only in well-ventilated areas
- Avoid breathing vapors or aerosols
- Wear gloves, safety goggles, and protective clothing
- Pressurized container: do not puncture, incinerate, or store above 50°C
- Keep away from heat sources, open flame, and children
- In case of contact, rinse with plenty of water and seek medical attention

DISCLAIMER

The data presented in this sheet are based on laboratory testing and practical experience. Variations in substrate, application method, and environmental conditions may impact performance. Users are advised to carry out tests under their own conditions. Building Chemistry Industry's responsibility is limited to the product replacement in cases of proven manufacturing defect.

