



Technical Data Sheet

BC 721 Continuous Line pre blended system Two-Component 141 B-Based Continuous Sandwich Panel

1. Product Description

BC 721 Continuous PIR System is a two-component, HCFC 141B-blown rigid polyurethane foam system designed for continuous sandwich panel production.

When BC 721 Polyol is reacted with BC 768 Isocyanate at the specified mixing ratio (100/130), it produces a highly crosslinked, dimensionally stable, closed-cell PIR foam with excellent adhesion to metal facings.

The produced foam meets B2 fire rating (DIN 4102) and provides superior thermal insulation performance.

2. Features & Advantages

- HCFC 141B based system
- Two-component system optimized for continuous line production
- Fast & controlled reaction profile for production efficiency
- Stable PIR structure with improved fire behavior (B2)
- Low thermal conductivity for superior insulation
- Uniform cell structure and high compressive strength
- Designed for continuous panel machines (double-belt lines)

3. Typical Uses

- Continuous sandwich panel manufacturing
- PIR panels for cold rooms, prefabricated buildings & industrial structures
- Metal-faced insulating panels
- Exterior & interior cladding panels
- Ceiling, wall and roofing panels



4. Technical Data

(All values based on controlled laboratory conditions)

Property	BC 706 Continuous PIR System
System Type	Two-component, HCFC 141B based PIR
Mix Ratio (Polyol / ISO)	100 /130
Cream Time	9 seconds
Gel Time	32 seconds
Free Rise Density	36 kg/m ³
Polyol Viscosity (25°C)	400-500 mPa.s
Isocyanate Viscosity (25°C)	210 mPa.s
NCO Content	31% (by weight)
Foam Density	42-46 kg/m ³
Fire Rating	B2 (DIN 4102)
Compressive Strength	110 kPa
Dimensional Stability	< 1%
Thermal Conductivity	0.021 W/m·K

5. Surface Preparation

- Metal facings must be clean, dry, and free from oil, dust, rust, and release agents
- Panels must be properly preheated as per machine settings
- Moisture contamination must be avoided to prevent foaming defects



6. Mixing

- Ensure homogeneous mixing of Polyol and Isocyanate through the continuous line metering system
- Maintain accurate metering ratio: 100 /130
- Homogenize Polyol before feeding into machine
- Keep materials between 15°C and 35°C before processing

7. Application

- Suitable only for continuous sandwich panel production lines
- Ensure machine parameters are set according to recommended reactivity times
- Apply between metal surfaces and allow expansion under double belt pressure
- Maintain stable substrate and chemical temperatures for optimum foam quality

8. Packaging

- BC 721 Continuous Polyol: 220 kg Drum
- BC 768 Isocyanate: 250 kg Drum

9. Shelf Life & Storage

- Polyol: 6 months
- Isocyanate: 6 months
- Store between 15°C and 25°C in dry, ventilated areas
- Protect from direct sunlight, moisture, and extreme temperatures
- Low temperature increases viscosity; high temperature may cause loss of blowing agent

10. Health & Safety

- Use air-purifying respirator during handling
- Wear protective gloves, goggles, and full body covering
- Avoid inhalation of vapors during foaming
- Ensure adequate ventilation
- Refer to SDS for detailed safety guidelines

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.

