

Technical Data Sheet

BC 714 Foam

Two-Component Polyurethane Foam System

1). Product Description

BC 714 Foam is a two-component, 141B-based rigid polyurethane system formulated for discontinuous production of sandwich panels, heaters, and rigid insulation foam applications. When reacted with BC 768 Isocyanate, the system produces a high-quality rigid PU foam with excellent mechanical strength, dimensional stability, strong adhesion, and B2 fire classification according to DIN 4102. The foam also demonstrates low thermal conductivity and stable performance across a wide temperature range.

2). Features & Advantages

- B2 Fire Rating (DIN 4102)
- Excellent dimensional stability (<1%)
- Strong adhesion to various substrates
- Low thermal conductivity (0.023 W/m·K)
- Suitable for sandwich panels & heater applications
- Good compressive strength
- Controlled reaction profile for uniform cell structure
- Excellent performance across -100°C to +150°C

3). Typical Uses

- Sandwich panel production (discontinuous process)
- Heater manufacturing
- Insulated rigid structural components
- General discontinuous PU foam applications requiring B2 fire rating



4). Technical Data

Category	Property	Value
Reaction Characteristics	Cream Time	22 seconds
	Gel Time	120 seconds
	Free Rise Density	31 kg/m ³
	Mixing Ratio (ISO/Polyol)	1.2/1
Compound Characteristics	Polyol Viscosity	500 mPa · s @ 25°C
	Isocyanate Viscosity	210 mPa · s @ 25°C
	NCO Content	31% by weight
Polymer (Foam) Properties	Density	40–43 kg/m ³
	Compressive Strength	110 kPa
	Dimensional Stability	< 1%
	Thermal Conductivity	0.023 W/m · K
	Water Absorption	< 0.1%

5). Surface Preparation

- Ensure all surfaces are clean, dry, and free from dust, oil, and contaminants.
- Avoid moisture as it reacts with isocyanate and affects foam quality.
- Pre-condition both components to optimum temperature (18–22°C) before processing.

Mixing

- Maintain correct mixing ratio (1.2:1 — ISO: Polyol).
- Pre-heat materials if required but never below 10°C.
- Proper mixing pressure and machine calibration are essential for uniform foam quality.



6). Application

- Suitable for discontinuous PU foam production using standard high- or low-pressure PU dispensing machines.
- Dispense directly into molds or panel cavities.
- Allow foam to fully expand and cure before demolding.
- Ensure proper ventilation during application.

7). Packing

- BC 714 Polyol: 220 kg drum
- BC 768 Isocyanate: 250 kg drum

8). Shelf Life & Storage

- Shelf Life: 6 months (both components)
- Store in a cool, dry place at 10–20°C.
- Do not allow drums to drop below 10°C to avoid crystallization.
- Keep containers tightly closed to avoid moisture contamination.

9). Health & Safety

- Use air-purifying respirator during handling.
- Wear rubber gloves, protective clothing & safety goggles.
- Avoid inhalation of vapors and skin contact.
- Dispose waste according to local regulations.
- Refer to MSDS for detailed safety instructions.

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.

