



Technical Data Sheet

BC 702 Spray 40 FR

Two-Component 141B-Based B2 Fire-Rated Spray Foam System (40–45 kg/m³)

1). Product Description

BC 702 Spray 40 FR is a two-component spray-applied rigid polyurethane foam system consisting of BC 702 Polyol and BC 768 Isocyanate, formulated to produce a B2 fire-rated, closed-cell foam with a density of 40–45 kg/m³. It provides excellent thermal insulation, dimensional stability and strong adhesion to most construction substrates. The system is designed for use with standard 141B spray foam machines and offers fast reaction times suitable for high productivity.

2). Features & Advantages

- B2 Fire-Rated rigid polyurethane foam
- Fast cream, gel and tack-free times
- Excellent adhesion to most substrates
- Closed-cell structure with very low thermal conductivity
- Dimensionally stable crosslinked structure
- High compressive strength
- Suitable for continuous spray application
- Efficient thermal insulation for industrial & building applications
- Lightweight, seamless, and uniform coverage

3). Typical Uses

- Roof, wall, tank and pipe insulation
- Cold rooms, refrigerated structures
- Industrial insulation applications
- General building insulation
- Spray-applied rigid foam for construction sectors
- Areas requiring B2 fire classification according to DIN 4102



4). Technical Data

(All values tested under controlled laboratory conditions)

Property	BC 702 Spray 40 FR System
System Type	Two-component, 141B-based, B2 Fire Rated
Mix Ratio (ISO: Polyol)	1:1
Cream Time	4 seconds
Gel Time	7 seconds
Tack-Free Time	11 seconds
Polyol Viscosity (25°C)	400 mPa ·s
Isocyanate Viscosity (25°C)	210 mPa ·s
NCO Content	31% by weight
Foam Density	40–45 kg/m ³
Compressive Strength	150 kPa
Dimensional Stability	≤ 1%
Thermal Conductivity	0.023 W/m ·K
Fire Classification	B2 – DIN 4102
Blowing Agent	141B Based

5). Surface Preparation

- Substrates must be clean, dry, sound, and free from dust, oil, or contaminants.
- Do not apply on moist or wet surfaces.
- Fresh concrete should cure for minimum 28 days.
- Ensure drum storage area and surface temperature are above +10°C.
- Avoid any contact with moisture as it affects reactivity and foam performance.



Mixing

- Mix precisely using a standard spray foam machine maintaining a strict 1:1 ratio.
- Maintain component temperatures between +10°C to +30°C.
- Keep polyol under continuous agitation.
- Avoid crystallization — do not allow drums to fall below +10°C.

6). Application

- Apply using a high-pressure 141B-compatible spray machine.
- Ensure correct hose, gun, and material temperature.
- Apply in multiple passes to achieve desired thickness.
- Do not apply on surfaces subject to condensation.
- Avoid application during rain or when rain is expected within 6–8 hours.
- Not recommended for negative-side waterproofing.

7). Packing

- BC 702 Polyol 40 FR: 220 kg Drum
- BC 768 Isocyanate: 250 kg Drum

8). Shelf Life & Storage

- 6 months in original, unopened drums.
- Store between +10°C and +30°C.
- Keep away from direct sunlight.
- Protect from moisture and humidity—moisture can alter reactivity.

9). Health & Safety

- Wear gloves, protective clothing, goggles and respiratory protection.
- Ensure proper ventilation during spraying.
- Avoid inhalation of vapors or direct skin contact.
- Follow all safety instructions provided in the SDS.

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.

