Technical Data Sheet

BC 601 FOAM SYSTEM

Flexible Polyurethane Foam System

1. Product Description

BC 601 Foam System is a two-component flexible polyurethane foam system composed of BC 601 Polyol FG and BC 768 Isocyanate.
The system produces high-quality flexible foam with excellent softness, resilience, compression recovery, breathability, and dimensional stability.
It is suitable for automotive seating, furniture cushioning, toys, stuffed items, mattresses, and general-purpose flexible foam applications.

2. Typical Applications

- Automotive seat cushions
- Toys & stuffed items
- Sofa, office, and furniture cushions
- Mattresses & comfort padding
- Flexible foam blocks for general applications

3. Technical Data

Property	Unit	Typical Value	Test Method
POLYOL (BC 601 POLYOL FG)			
Hydroxyl Number	mg KOH/g	56 – 60	ASTM D4274
Acid Value	mg KOH/g	≤ 0.05	ASTM D4662
Viscosity @ 25°C	mPa·s	450 – 650	ASTM D4878
Water Content	%	≤ 0.05	ASTM D4672
Appearance	–	Clear to pale yellow liquid	Visual
Functionality	–	3	Theoretical
Specific Gravity @ 25°C	–	~1.02	ASTM D891
Storage Stability	Months	12	Internal Spec

ISOCYANATE (BC 768 ISOCYANATE)			
NCO Content	%	31	–
Viscosity @ 25°C	mPa·s	~210	–
Appearance	–	Brownish liquid	Visual
Specific Gravity @ 25°C	–	~1.24	–
FOAM PROPERTIES (CURED FOAM)			
Density	kg/m³	18 – 28	Internal Spec
Compression Load Deflection (25% CLD)	kPa	3 – 6	ASTM D3574
Tensile Strength	kPa	90 – 120	ASTM D3574
Elongation	%	120 – 160	ASTM D3574
Tear Resistance	N/m	180 – 220	ASTM D3574
Resilience (Ball Rebound)	%	35 – 45	ASTM D3574
Cell Structure	–	Fine & uniform	Visual

4. Processing Guidelines

- Maintain Polyol & Isocyanate at 20–25°C for stable reactivity.
- Stir Polyol thoroughly before use.
- Prevent moisture contamination; moisture causes CO_2 bubbles and foam defects.
- Suitable for:
  - Manual mixing
  - Low-pressure dispensing
  - High-pressure foaming systems

5. Packing

Material	Standard Packing
BC 601 Polyol	220 kg drum
BC 768 Isocyanate	250 kg drum

6. Storage & Handling

- Store in tightly sealed original containers.
- Protect from moisture, humidity, and direct sunlight.
- Recommended storage temperature: 15–35°C.
- Shelf life: 12 months from production.
- Isocyanate may crystallize below 10°C; warm gently to re-liquify.

7. Health & Safety

- Use gloves, goggles, and protective clothing.
- Avoid inhalation of vapors and direct skin contact.
- Ensure proper ventilation when processing.
- Dispose of waste as per local regulations.
- Refer to SDS for full safety instructions.