

August 4, 2022

B5021-HFO INSTALLATION PROCEDURES

Product Description –

B5021-HFO/A2732 is a two-component spray-applied polyurethane foam system. The primary purpose of the system is to act as a ditch break. The product is formulated free of ozone depletion substances (zero ODS). The system is based on renewable substances and recycled products. This system is designed to be built-up in thickness without scorching or foam splitting.

Typical Uses –

This foam system is primarily used as a ditch break. Other areas of use include all applications that require a medium density spray foam that can be installed to significant thicknesses.

Component Specifications –

PROPERTY	ISOCYANATE A2732	B5021-HFO RESIN
Appearance	Brown liquid	Amber liquid
Viscosity at 25°C	150-250 cps	200 - 300 cps
Specific gravity	1.22 – 1.25	1.15 – 1.20
Shelf life	12 months	6 months

Application Guidelines –

1. Material shall be heated to a minimum of 35°C (95°F). Depending on ambient heat, the heat can be increased to 45°C (115°F).
2. Ambient temperature limitations are -20°C (-4°F) to 35°C (95°F). Spraying outside this temperature range may result in material malfunction.
3. Density test should be performed on a test area before production spraying commences. Density procedures are calculated by using the CAN/ULC S705.2 Volumetric methodology. Density is calculated by –
 - a. Taking a sample piece that is greater than 5.5 grams, less than 10 grams
 - b. Weighing and recording sample weight (M)
 - c. Determining volume of sample using water displacement method (submerging sample in water-filled beaker and subtracting submerged recording from non-submerged data.
 - d. Complete density test by using formula: $D = M/V$ (Kg/m³). To convert to lbs/ft³, multiply by 0.0624
 - e. Minimum density is 33.6 Kg/m³ (2.1 lbs/ft³)

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Application Guidelines –

4. If material does not meet the minimum density required, spraying shall not commence. Contact Genyk representative to receive further instructions.
5. If preliminary conditions are met – material/ambient temperature, and minimum material density, B5021-HFO material can be applied.
6. The Gel time of B5021-HFO is 5 seconds at 20C. Further, the product is designed to be sprayed in thicknesses of up to 6" (150mm) at one time without scorching or issues with excessive exotherm.
7. To facilitate correct curing, after a maximum of five passes (30"/750mm) are installed, the installer should leave the material for twenty minutes to ensure a proper cure. After the twenty minutes has elapsed, another 30" thickness can be installed in five passes, and so on. There is no limit to the total thickness installed if this sequence is followed.
8. The curing period for Breaker material is twenty minutes.
9. After the breaker is completed, backfilling can commence after one hour. It is strongly recommended that the breaker is completely backfilled no longer than 48 hours after completion.
10. Breaker material that is left exposed after 48 hours is subject to UV degradation.

Application Limitations –

1. Pass thickness shall be no less than 50mm (2 inches); no more than 150mm (6 inches).
2. Substrate must be free of moisture.
3. Installation must be done when ambient temperature is between -20°C (-4°F) to 35°C (95°F).
4. Service temperature of B5021-HFO is -60°C (-76°F) and +80°C (+176°F).

Storage Conditions –

1. All materials stored at Genyk warehouses are kept between the temperatures of 15°C (59°F) and 25°C (77°F).
2. Materials shipped from the Genyk warehouse to the production site are to be kept at temperatures between 5°C (41°F) and 25°C (77°F). Bill of Ladings will include temperature limitations posted during inclement weather months.
3. All materials should be stored in their original containers and away from heat and moisture.
4. Shelf life of B5021-HFO is six months; shelf life of A2732 is twelve months.
5. Storage temperature of B5021-HFO must be between 5°C (41°F) and 25°C (77°F).
6. Storage temperature of A2732 must be between 5°C (41°F) and 38°C (100°F).
7. Storage below 5°F (41°F) may result in compound stratification of B5021-HFO and/or crystalline formation of A2732.
8. Containers should be opened slowly to allow any pressure build-up to be vented safely.
9. Both B5021-HFO and A2732 are adversely affected by water and humidity. Containers must be sealed during storage.

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Health and Personal Protection –

1. Before handling B5021HD and/or A2732, consult the Material Safety Data Sheets. Available from Genyk at – www.genyk.com Genyk – 819.729.03952.
2. When installing B5021HD outside of enclosed structures –full face respirators with charcoal filters must be worn when spraying (and within 10 meters/33 feet of point of spray)
3. When install B5021HD within any structure – fresh-air supplied, full face respirators must be worn when spraying (and within 10 meters/33 feet of point of spray)
4. Additional Personal Protective Equipment (PPE) must be worn at all times when spraying/handling the B5021-HFO system:
 - a. Disposable coveralls
 - b. Chemical resistant gloves (nitrile suggested)
5. Site regulations covering PPE must always be followed when spraying the B5021-HFO system.

Genyk Polyurethanes is dedicated to the proper installation and safe handling of all their manufactured systems. If you require any clarification, please contact –

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