



## ***BG699(WPU101) HYDROPHILIC SINGLE-COMPONENT PU FOAMING AGENT Environmentally friendly***

### **1.Product Introduction**

**BG-669 (WPU101) hydrophilic single-component polyurethane foaming agent**, is a water-activated (hydro-active) water cut-off grout and foam seal grout based on a TDI, The resin is 100% solvent free, and mainly made up of composite polymer polyols and multivariate isocyanate. Upon contact with water, **BG-669** hydrophilic single-component polyurethane foaming agent generates gas and reacts immediately to flexible hydrophobic foam while expanding its volume 12 to 15 times and then expand rapidly to fill with cracks, beehives, etc. The cured material is of a constant volume. Since water is not a component of the foam structure, the cured material is essentially not affected by water or dryness. Effective in stopping the water leakage, can stagnate water as well as reinforce.

### **2.Product indicators**

Inspection items	Quality indicators	Implementation Standards
Outside View	Light yellow to reddish brown transparent liquid	Visual inspection
density	1.00-1.15 g/cm <sup>3</sup>	GB/T8077
Non-volatile matter content	≥78 %	GB/T16777
Viscosity	≤500mpa·s	GB/T2794
Gel time (solid-liquid ratio 1:15)	≤90 s*	JC/T2041
Water-containing	≥15 times water*	JC/T2041
Water expansion rate of the consolidated body (28d)	≥50 %	JC/T2041

\* Standard conditions: temperature 23 ± 2 °C, relative humidity 50 ± 5%

### **3.Product Features**

- Its lower viscosity not easy to block the tube of injection equipment when continued operation
- It's a water-activated (hydro-active) water cut-off grout and foam seal grout, can absorpt

the water quickly, keep dry within the gap, otherwise remaining water will destroy the foam, causing secondary leaks.

- Good reaction with water and complete gelling in about 30 to 120 seconds, 3 to 5 hours to hardening. No damage and no erosion to RC structure and steel bars.
- Well adhesive with concrete, will not delaminate with concrete.
- Can react with weak acidic or weak base water even seawater. Will not affect the physical and chemical properties of seawater foam.
- Strong structural, high toughness, can resist water long time.
- 100% solvent free .Unregulated For Transport

#### **4.Application areas**

Basement, distorted cracks, construction joint, Tunnel line in the subway and tunnel project, hydro-power and dam project, oil and coal mining project. It plays a role in reinforcement and leaking stoppage.

BG-669(WPU101) excellent in floods leakage and sand land improvements, such as sand bed which easy to collapse, inject BG-669(WPU101) can be completely mixed with sand and form a hydrophobic flexible gelatinous. To avoid the collapse when excavating sand.

#### **5.Usage method**

- Support to use with **BG® Brand** Product-Pump-Packer System Solution. Please refer to the Operation Instruction of Single Liquid injection Machine for detailed information.
- Observe temperature and humidity of the environment, since both determine the react time.
- BG-669(WPU101) hydrophilic single-component polyurethane foaming agent reacts with the moisture in the structure and does not need large amounts of water to react. Simultaneous injection of water is typically not necessary. If the area of application seems to be completely dry, pre-injection of water may be recommended in some circumstances.
- All equipment, pumps and hoses must be dry. Avoid moisture contact with the mixture to prevent premature reaction. If product foams while pumping, immediately shut down the machine and flush with a cleaner to avoid built up and clogging of the equipment.
- Tools and equipment must be cleaned immediately after use. Remove all excess product. Cured product is hard to remove.

#### **6.Storage and Package.**

- Storage methods: at 15-30 C / 58-85F. in dry, sun free indoors  
Unopened Containers Only. 6months. Sealed dry preservation after open containers.  
(Do not store in the temperature below -5°C. or up to 40°C)
- Package:2.5 gallons (10kg)/drum、 4 gallons(20kg)/drum

**If necessary, MSDS can be offered upon your requirement**

## Health and Safety

Protect your health! always use safety gear in compliance with OSHA and all applicable local and job-site regulations. While working with products. Handling of this product may result in spills, splashes, and airborne substances. Wear appropriate safety goggles, gloves and safety clothing at all times. During the pressure injection process a full face shield is advised for anybody within reach of product spill or blowout. Consider property in proximity of the application to prevent loss or damage. Protect jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals! Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and

equipment. In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area. Further protection: emergency showers and eyewash stations.

**Get immediate medical attention as needed.**

## Guangzhou BangGuan Automation Co., LTD

Address: ROOM302, NO.41 DALONG, SHILIAN ROAD,SHIQI TOWN, PANYU DISTRICT, GUANGZHOU CITY, CHINA

Phone: [+86-19307529684](tel:+86-19307529684)

E-mail: [admin@bangguanauto.com](mailto:admin@bangguanauto.com)

Website: [www.bangguanauto.com](http://www.bangguanauto.com)