**Two-component SPU Modified Polyurethane Sealant**

**Technical Data Sheet**

Technical Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Model | HY467 | HY468 | HY469 |
| Appearance | Even and fine paste, no bubbles, agglomeration, etc. |
| Color | A/B component | White / gray | White / gray |
| Density (g/cm3) | A/B component | 1.3±0.1 | 1.2±0.1 | 1.1±0.1 |
| Viscosity (Pa·S) | A/B component | 100±50 | 150±50 | 150±50 |
| A:B volume ratio | 1:1 | 1:1 | 10:1 |
| Pot life (25℃,min) | ≥3 |
| Positioning time (25℃,min) | ≤30 |
| Hardness (Shore A) |  30±10 | 40±10 | 50±10 |
| Shear strength (Mpa) | 23℃ 3h | 0.7 | 0.9 | 1.2 |
| 23℃ 1d | 1.0 | 1.5 | 2.5 |
| 23℃ 7d | 1.5 | 2.5 | 4.0 |
| form of destruction | cohesive destruction |
| Tensile strength (23℃7d, Mpa) | 1.5 | 2.5 | 4.0 |
| Elongation at break (23℃7d,%) | 400 | 400 | 300 |
| Tear strength (23℃7d,KN/m) | 5 | 6 | 8 |
| Temperature resistance range (℃) | -40~120 |

Remark: Measured after curing for 7 days at 25°C and 55% relative humidity.

**Product Description**

A solid two-component modified polyurethane structural adhesive, no solvent, no isocyanate, almost zero VOC, anti-pollution after curing, green environmental protection, excellent anti-aging ability and so on. Fast deep curing, suitable for rapid bonding and sealing in automobiles, rail transit, electronic appliances and other fields. This product complies with environmental protection requirements, does not contain harmful substances in GB18583 "Limited Limits of Hazardous Substances in Adhesives for Interior Decoration Materials", and complies with EU ROHS and REACH environmental protection standards. In line with the German automotive industry environmental standards.

**Main Applications**

HY467: High modulus, used for rapid sealing and deep curing of parts and components in the automotive, rail transit, electronic and electrical industries.

HY468: High modulus, high strength, used for rapid bonding and deep curing of parts and components in the automotive, rail transit, electronic and electrical industries.

HY469: High modulus, ultra-high strength, used for fast bonding with ultra-high strength and deep curing requirements.

**Product Features**

1. No solvent, no PVC, no isocyanate, non-toxic, odorless, non-polluting, neutral and environmentally friendly.
2. Rapid curing at room temperature (self-drying glue), wide applicable temperature range.
3. Excellent adhesion to most metals, ceramics, glass, engineering plastics and other materials, and better performance with primer.
4. Excellent weather resistance, aging resistance, excellent tensile and compression recovery.

**Curing Mechanism**

The two-component modified polyurethane sealant, the curing method is formed by the reaction of silane and curing agent. Once the colloid is mixed, it gradually becomes an elastomer through a condensation reaction. The higher the temperature and the higher the humidity, the faster the curing; the slower the curing speed is in the low temperature and low humidity environment.

**Resistant to chemical media**

The product can be resistant to fresh water, sewage, waste water, calcium carbonate aqueous solution, detergent, low acid, corrosive aqueous solution, etc. for a long time, and be short-term resistant to mineral oil, vegetable oil, fat, fuel, etc. But not resistant to organic solvents, paint thinners, etc.

**Instructions**

1. The bonding surface should be free of oil stains, dust, impurities, etc.;

2. Cut the mixer nozzle into the required size and shape according to the process requirements;

3. Put the hose into the glue gun, lightly press the handle to press the piston into the hose, remove the cover, squeeze out 3-5ml of glue, ensure that components A and B are glued smoothly, install the mixer (recommended to use 24 and above mixer), start using;

4. Apply the mixed glue evenly on the bonding place, the thickness is determined by the process requirements, the thinnest part should be greater than 1mm; when using a pneumatic gun, the air pressure is controlled at 0.2~0.4Mpa;

5. After the product is dry, it can be trimmed by traditional methods.

**Matters Needing Attention**

1. Avoid construction in the environment below 10℃ and humidity less than 20%
2. Pneumatic pressure is strictly prohibited to exceed 0.5 Mpa. When it exceeds, the gas will enter the hard packaging tube, causing the problem of colloidal bubbles.
3. Because the high solvent content of the coating will cause the surface of the glue to become soft, in order to obtain the best appearance and performance, the glue should be colored after curing for 24 hours.
4. For special chemical reactions, please contact the technical department of our company.

**Packing Specification**

Cartridge: HY467, HY468, 400ml (500g)/unit;

HY469, 490ml (600g)/unit;

Barrel: A 190L/drum, B 190L/drum (19L/drum)

**Storage and Transportation**

Polyurethane structural adhesive, the well-packaged product can be stored for 6 months in a cool, ventilated and dry place at 5-27°C.

This product is non-dangerous and can be transported by train, car, ship and plane.

**Safety and Health**

Do not contact uncured structural adhesive with food and cosmetics;

Uncured structural adhesive should not be in contact with the skin for a long time;

If the sealant accidentally gets into the eyes, it must be flushed immediately with plenty of water and then checked by a doctor;

Keep the product out of the reach of children.

**Statement**

The technical parameters involved in this article are typical values, not as product acceptance criteria, for reference only. The above data are obtained under standard laboratory conditions, and our company guarantees that they are reliable. However, due to different working conditions used by users, different surface states of materials, and different curing conditions, some changes in actual performance data are normal. Storage conditions, transportation and other factors will affect the stability and physical and mechanical properties of the glue. We are not responsible for the results obtained by anyone using methods beyond our control. It is recommended that users do experiments based on the data provided in this article before using them formally.

