GLUDITEC
Glue & Dispensing Technology

# Technical Data Sheet

# PUT3220-2-3

***Two-component Polyurethane Potting Adhesive***

PUT3220-2-3 is a synthetic polyurethane potting adhesive comprising two liquids, PUT3220-2-3 A and PUT3220-2-3 B. It offers easy application, moderate hardness upon curing, strong adhesion, weather resistance, flame retardancy, and electrical properties. Additionally, it meets EU REACH and 80832.0 standards along with other environmental regulations.

## TYPICAL USES

This item is ideal for securely potting new energy battery modules, capacitors, power supplies, controllers, and various other electronic and electrical devices.

## TYPICAL PROPERTIES

| | Item | PUT3220-2-3A | PUT3220-2-3B |
|---|---|---|---|
| Before curing | Exterior | Brown liquid | Black liquid |
| | Viscosity(cps) 2 | 80 ± 50 | 20000 ± 5000 |
| | Density(g/cm².25°C) | 1.1 ± 0.05 | 1.7 ± 0.05 |
| After mixing | Mixing ratio ( by weight ) | A : B = 20 : 100 | |
| | Open time (130g, 25 °C) | 30 ± 5 min | |
| | Tack free time (130g, 25 °C) | 3-4h | |
| | Fixed time(130g, 25°C) | 6-8h | |
| Solid change back | Color | black | |
| | Hardness(shore A) | 80 ± 5 | |
| | Application temperature(℃) | - 40 - 130 | |
| | Water absorption (24H) | ≤ 0.5% | |
| | Glass transition temperature | 15°C | |
| | Shear strength (MPa Al-Al) | ≥ 2 | |
| | Thermal conductivity (W/mk) | ≥ 0.85 | |
| | Volume resistivity (cm) | ≥ 1.0 x $10^{14}$ | |
| | Dielectric strength (kV/mm) | ≥17 | |
| | Dielectric constant (bt 50Hz) | 3-6 | |
| | Flammability rating, UL94 | V0 | |

## INSTRUCTIONS FOR USE

- Preparation: Ensure the surface is thoroughly cleaned and dried before applying the glue.
- Glue Mixing: Agent B contains fillers. Stir Agent B well prior to mixing, then weigh and blend it evenly in precise proportions.
- Degassing: Transfer the mixed glue to a vacuum chamber, apply a pressure of -0.1Pma, and remove it after 1-2 minutes.

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- Fill the vacuumed adhesive into the product promptly, ensuring to prevent the formation of bubbles during the filling process. The curing can be achieved either at room temperature or by applying heat.
- The recommended temperature for heating and curing is approximately 60 degrees Celsius.

## PRECAUTIONS

- When using this product, ensure to utilize specialized equipment, thoroughly mix the components evenly, and ensure that they are free of moisture.
- The mixture should be fully utilized within the designated time frame to prevent solidification and render it unusable.
- It is advised to promptly consume the adhesive once opened and seal any remaining portion tightly to avoid moisture absorption.
- In case of eye contact, immediately flush with water for at least 15 minutes. For skin contact, wipe off excess material with a cloth and cleanse the area with water and soap.
- It is recommended to work in a well-ventilated area when applying the adhesive.

## STORAGE AND SAFEKEEPING

- Do not place it in direct sunlight, store it in a cool and dry place.
- Keep out of reach of children.
- Keep at room temperature and humidity for 3 months.

## PACKAGING SPECIFICATIONS

Agent A: 5KG, 10KG, 20KG/barrel,
Agent B: 25KG, 100KG, 200KG/barrel

## WASTE DISPOSAL

If the substance is free of contaminants, it can be disposed of in a landfill without causing water pollution. The waste can also be incinerated in waste treatment facilities. It is important to adhere to local environmental regulations. Please note that the data provided in this manual were collected under controlled laboratory conditions with 70% humidity and a temperature of 25 degrees Celsius. These values are for reference only and may vary depending on the specific environment. Users should consult this information for analysis and experimentation due to different usage conditions. For any issues during construction or use, feel free to contact GLUDITEC's technical support for assistance.