



Technical Data Sheet

Product Name: Polyurethane Adhesive for CPU (Cast Polyurethane) and TPU (Thermoplastic Polyurethane)

Typical Properties:

Model	Appearance	Colour (Fe-Co)	Density g/cm ³ (25°C)	Viscosity mPa.s (25°C)
CUBD-3625A1	Brown transparent liquid	≤12	1.168	2300±500
CUBD-3625A2	Colorless to yellowish transparent or slightly turbid liquid	≤2	1.172	2500±500
CUBD-3625B	Emulsion liquid	≤2	1.006	40±20

Solubility: Insoluble in water, soluble in xylene, esters and other organic solvents.

Features & Applications:

CUBD-3625A/B is designed for the firm adhesion of CPU and TPU polyurethane materials to various polar surfaces in a wide temperature range. Its unique features are as follows:

- **Wide process temperature.** It can realize the firm bonding between cast polyurethane and the surface of various polar materials in the range of 10-140 °C, solve the drawback that common adhesives must be activated at high temperature above 120 °C, and broaden the normal temperature and high temperature production process of polyurethane semi prepolymer method.
- **It is applicable to the bonding of polar surfaces such as aluminum, steel, cast iron, cement, PU, etc., and it is applicable to the requirements of shear resistance bonding at dynamic high-temperature.** For example, it is used in various PU casters, PU rubber rollers and other fields requiring high adhesion. Due to its high wetting property, it can completely infiltrate the bonding surface to avoid the defect that the general adhesive is easy to include bubbles and results in virtual adhesion and degumming.
- **The price is affordable, and the dosage is less.**

User's Guide:

1. CUBD-3625A/B is a two-component adhesive. The recommended use proportion is A:B=1:5. It can be brushed / sprayed after mixing evenly. It is recommended to be prepared when use, and be used up within 2-3 hours after mixing. In order to avoid waste caused by the final curing of the mixed residual glue solution, it is recommended to make a plan for the dosage and application time before use.
2. It is recommended to carry out necessary treatment on the bonding surface before painting CUBD-3625A/B. Generally, the surface should be roughened by sand blasting after cleaning. Note that the bonding surface should not pollute sweat, oil, etc., otherwise the bonding strength will be affected to certain degrees.
3. General products can be sprayed once, and surfaces with complex shapes can be sprayed 1-2 passes as appropriate. It is not recommended to spray more than 3 passes. Too thick adhesive layer is not conducive to the improvement of adhesive strength.
4. **Bonding process of casting CPU material:** After the substrate is sprayed with CUBD-3625A/B, it is generally aired for about 1-2 hours at normal temperature, and the casting production can be carried out after the glue is basically dry.
5. **Bonding process between thermoplastic TPU material and metal:** It is recommended to aired for about 1-2 hours after spraying. Small products can be directly produced by injection molding. Large products should be pre heated to 80-100 °C for injection molding.
6. **Bonding process between thermoplastic TPU and nylon:** It is required to pre brush the nylon surface with the special adhesive CUBD-NL04 for nylon substrate and air it for about 40 minutes, and then inject TPU material according to the above guide 5th. Please refer to the product manual for the usage of special adhesive CUBD-NL04 for nylon substrate.
7. CUBD-3625A1 is a general model; CUBD-3625A2 is nearly colorless and does not change the appearance of the bonded surface. It is suitable for products with high requirements on the appearance of the substrate.
8. It is recommended that the workshop environment using CUBD-3625A/B should be well ventilated and away from fire sources; Operators shall wear gloves, goggles and other necessary protective equipment.



Handling & Storage:

Product should be stored in a cool, dry and ventilated environment away from sunlight, excessive heat and fire sources.

Package: 20kg/180kg in HDPE drum

Shelf Life: The unopened shelf life is 12 months from the date of manufacture. After expiration, if the bonding effect is not reduced, it can still be used as qualified products. Please note that it must be kept closed after use.

All recommendation and technical information (whether verbal, written or by way of product evaluations), including any suggested formulations contained herein is provided for information purpose only and does not constitute a legal contract as well as suitable for relating to the third party rights. The conditions of your use and application of our products, technical assistance and information are beyond our control. Therefore, no guaranty or warranty for your evaluation is made. Consequently the user assumes all risks in connection with the use and handling of this product based on our technical information and recommendations, final determination of suitability of this product is the sole responsibility of the user.