

Shenzhen Jianghe New Materials Technology Co.,Ltd

Technical Data Sheet (TDS)

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312AB-6-N

Typical Properties

Epoxy Resin 312AB-6-N is an epoxy adhesive formulated to cure effectively at room temperature or under low-temperature conditions. It demonstrates excellent leveling and self-debubbling characteristics, along with outstanding yellowing resistance. The cured resin achieves high hardness and a smooth, ripple-free surface, making it suitable for both room temperature and heat-assisted curing processes.

Applications

Epoxy Resin 312AB-6-N is specifically engineered for specialized applications including luminous signage resin casting, badges, identification cards, handicrafts, lighting fixtures, LED strip potting, mold casting, along with insulation, moisture-proof encapsulation, and confidential sealing of electronic components.

Physical & Chemical Properties

Property	Part A: 312A-6-N	Part B: 312B-6-K
Color	Colorless Transparent	Colorless Transparent
Density (g/cm ³)	1.07±0.05	0.95±0.03
Viscosity (mPa•s)	1800±400	100max
Brookfield DV2TRV Viscometer	25°C	
Mix Ratio (by Weight)	3 : 1	
Mix Ratio (by Volume)	2.7 : 1	

Properties of Cured Material

Property	Base + Curing Agent
Physical State	Liquid
Viscosity (mPa•s)	500±200mPa.S
Brookfield DV2TRV Viscometer	25°C
Pot Life (100g mass @ 25°C)	38±5 min
Brookfield DV2TRV Test, Maximum Viscosity 800mPa·s	
Dosage	280-350 g/m ² (varies with substrate)

Processing & Curing Parameters

Initial Cure	Approx. 10-12 hours at Room Temperature (RT)
Full Cure	2 days at Room Temperature (RT)
Service Temperature Range	0°C to 80°C

Application Instructions

Working Conditions: Ensure the mixing container is clean. Measure Components A and B strictly by the designated weight ratio. After accurate weighing, stir the mixture thoroughly in a clockwise direction, scraping the inner walls of the container. Allow the mixture to rest for 3-5 minutes before application.

Precautions

- Dosage Control:** Prepare the adhesive quantity based on the pot life and application rate to avoid waste.
- Low-Temperature Handling:** When the ambient temperature falls below 15°C, preheat Component A to 30°C before mixing to facilitate easier application, as the viscosity increases in cold conditions.
- Storage After Use:** The container must be sealed immediately after use to prevent moisture absorption, which can render the product unusable.
- High-Humidity Curing:** At relative humidity levels above 85%, the cured surface is prone to absorbing moisture from the air, forming a whitish haze. Therefore, room

temperature curing is not recommended under these conditions; heat-assisted curing is advised.

Test Result

Hardness	Shore D	84
Flexural Strength	Kg/mm2	28
Heat Deflection Temperature	°C	50
Water Absorption	%	<0.1
Compressive Strength	Kg/mm2	8.4

Save

Freeze-Sensitive	Yes	
Moisture-Sensitive	Resin	Curing Agent
	No	Sensitive
Recommended Storage Temperature	15°C to 25°C (Must not fall below 10°C or exceed 50°C.)	
Shelf Life	6 months in original, unopened packaging	
Packaging	Resin	Curing Agent
	5 kg pail	5 kg pail

Note: The performance data provided above are typical values obtained under laboratory conditions of 25°C and 70% relative humidity. They are for reference purposes only.