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Technical Data Sheet (TDS)

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318AB-7T

Typical Properties

Epoxy Resin 318AB-7T cures effectively at both room and elevated temperatures, offering high clarity, excellent self-debubbling performance, and a superior glossy finish.

Applications

Epoxy Resin 318AB-7T is specifically designed for module potting, mold casting, and critical electronic protection applications including insulation, moisture-proof encapsulation, and secure shielding of components.

Physical & Chemical Properties

Property	Part A: 318A-7T	Part B: 318B-7T
Color	Colorless Transparent	Colorless Transparent
Density (g/cm³)	1.07±0.05	0.95±0.03
Viscosity (mPa·s)	1300±300	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)	400±100mPa.S
Brookfield DV2TRV Viscometer	25°C
Pot Life (100g mass @ 25°C)	50±5 min
Brookfield DV2TRV Test, Maximum Viscosity 800mPa·s	
Dosage	280-350 g/m ² (varies with substrate)

Processing & Curing Parameters

Initial Cure	Approx. 14 hours at Room Temperature (RT)
Full Cure	48 hours at Room Temperature (RT)
Service Temperature Range	10°C to 70°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	83
Water Absorption	%	<0.1

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.