

Shenzhen Jianghe New Materials  
Technology Co.,Ltd

Technical Data Sheet (TDS)

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588AB-5

Typical Properties

Epoxy Resin 588AB-5 is a black potting compound formulated to cure under both room temperature and low-temperature conditions. It features good flowability, self-debubbling properties, and can be cured at ambient temperature or with heat assistance.

Applications

Epoxy Resin 588AB-5 is specifically designed for electronic component potting, power supply encapsulation, mold casting, as well as insulation, moisture-proof potting, and secure shielding of other electronic parts.

Physical & Chemical Properties

Property	Part A: 588A-5	Part B: 588B-1
Color	Black	Brown and Transparent
Density (g/cm <sup>3</sup> )	1.17±0.05	0.95±0.03
Viscosity (mPa•s)	9000±2000	200±50
Brookfield DV2TRV Viscometer	25°C	
Mix Ratio (by Weight)	5 : 1	
Mix Ratio (by Volume)	4.1 : 1	

## Properties of Cured Material

Property	Base + Curing Agent
Physical State	Liquid
Viscosity (mPa•s)	1000±300mPa.S
Brookfield DV2TRV Viscometer	25°C
Pot Life (100g mass @ 25°C)	20±5 min
Dosage	280-350 g/m <sup>2</sup> (varies with substrate)

## Processing & Curing Parameters

Initial Cure (50g, 25°C)	Approx. 1 hours at Room Temperature (RT)
Full Cure (50g, 25°C)	24 hours at Room Temperature (RT)
Service Temperature Range	-10°C to 120°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

<b>Hardness</b>	Shore D	85±5
<b>Dielectric Strength</b>	KV/mm	22
<b>Flexural Strength</b>	Kg/mm2	28
<b>Volume Resistivity</b>	Ohm3	$1 \times 10^{15}$
<b>Surface Resistivity</b>	Ohmm2	$5 \times 10^{15}$
<b>Thermal Conductivity</b>	W/M.K	0.60
<b>Dielectric Loss</b>	1KHZ	0.42
<b>Heat Deflection Temperature</b>	°C	140
<b>Water Absorption</b>	%	<0.15
<b>Compressive Strength</b>	Kg/mm2	11.3

## Save

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