

JBB Epoxy Board Adhesive

Application

- High Temperature bonding
- Bonding Epoxy Tooling board
- Bonding epoxy laminates

Properties

- High Temperature capability
- High flexural strength
- High compressive strength

Description

JBB Epoxy Board Adhesive is a rapid setting, low viscosity, epoxy system designed for use where temperatures may reach 177°C and may be used in many diverse applications. The system gels at room temperature, but requires a post cure to achieve maximum properties.

Physical Data

Property	Test Method	
Appearance	visual	Brown
Shore D Hardness	ASTM D-2240	88
Tensile Strength MPa	ASTM D-638	85
Tensile Modulus	ASTM D-638	3,210
Tensile Elongation	ASTM D-638	3.7
Compressive Strength MPa	ASTM D-695	128
Flexural Strength MPa	ASTM D-790	116
Flexural Modulus MPa	ASTM D-790	3,275
HDT, RT Cure °C	ASTM D-648	PCR
HDT Post cured °C	ASTM D-648	177
Izod Impact, notched J/m	ASTM D-256	66
Shrinkage m/m	ASTM D-2566	<0.003

Performance Properties

Property	Test Method	
Resin Density g/cc	ASTM E-201	1.15
Hardener Density g/cc	ASTM E-201	0.99
Resin Viscosity @ 25°C cps	ASTM D-2393	3,800
Hardener Viscosity @ 25°C cps	ASTM D-2393	70
Viscosity Mixed @ 25°C cps	ASTM D-2393	1,800

Processing

	Resin	Hardener
Mix Ratio by Weight (Calculated)	100	14
Mix Ratio by Volume (Calculated)	6	1
Gel Time @25°C, 150g mass, min	30	35
Tack free @25°C hours	PCR	

PCR = Post cure Recommended

Cure increments:

High temperature epoxy systems require an elevated temperature post cure to enable the resin and hardener to develop their full physical and temperature properties. Select one of the following cure schedules depending upon the physical properties of the master and the desired physical properties of the final tool. Please contact our technical department if you find it necessary to have a different post cure schedule.

	Option 1	Option 2
24 Hour @ 25°C	x	x
2 hours @ 66°C	x	
4 Hours @ 66°C		x
1 Hour @ 90°C	x	x
1 Hour @ 120°C	x	x
1 Hour @ 150°C	x	x
1 Hour @ 180°C	x	x

Safety Handling

Work in well ventilated areas using gloves, eye protection and clothing protection. Avoid contact to the skin and eyes. Avoid clothing contamination. Wash thoroughly after handling. These products may cause skin and respiratory allergic reactions. Consult Material Safety Data Sheets for complete precautions with this product.

Storage

Store the adhesive in a dry place at 16-38 °C. After use, tightly reseal. (This product may crystallize during storage. If crystallized, vent container and heat to 55-65°C until crystals dissolve. Stir well after the product has liquefied.) Always use clean dry tools for mixing and applying. Mix according to the mix ratio stated for the specific product as listed on the front page. Mix together thoroughly and use immediately. Material temperatures should not be below 18°C when mixing.

Disposal Consideration

Product: Must be disposed of in a special waste disposal unit in accordance with the corresponding regulations.

Packaging: Completely emptied packaging can be given for recycling. Packaging that cannot be cleaned should be disposed of as product waste.

The technical specification and/or our technical advice, whether verbal, in writing or by trials is given in good faith and based on our test results obtained, but without warranty. It does not release the user from the obligation to test products supplied by us or any other third party as to the suitability for the intended application.