



## Product Description

Vibra-Tite PB405 is a high performance two part methacrylate adhesive engineered to bond a wide range of plastics, metals, and composite assemblies. It offers outstanding bond strength, is extremely durable and quick setting, with excellent impact and elastic properties. Vibra-Tite PB405 greatly increases the reliability of finished assemblies with exceptional flexibility, its ability to with stand extreme temperature fluctuation and thermal cycling, and resistance to a wide range of chemicals and environmental conditions.

## Applications

Vibra-Tite PB405 is suitable for bonding combinations of the following substrates

### Metals

- Aluminum
- Steel
- Stainless
- Coated Metals

### Thermo Sets

- Fiberglass
- Gel Coats
- Epoxy
- Rim Urethane
- Polyurethane
- Liquid Molding Resins

### Thermoplastics

- Acrylics
- ABS
- Polycarbonate
- Nylons
- PPOs
- Vinyl's
- Polystyrenes
- PBT & PET Blends

## Features and Benefits

- No surface prep
- Excellent Strength
- Impact Resistant
- 100% Reactive
- Room Temperature Cure
- Easily Applied

## Physical Properties

### Uncured

Viscosity @ 25°C (cps):

Resin.....	100,000-140,000
Activator .....	30,000 – 50,000
Color .....	Off White and Amber Cured
Mixed Density .....	8.00
Mix Ratio:	
By Volume .....	10 to 1
By Weight .....	10 to 1
Thixotropic Index .....	5
Flash Point.....	51°F

### Cured

Shear Strength, psi.....	1750-2800
Tensile Strength, psi .....	2500-3500
Work Time, Minutes .....	2-3
Handling Strength, Minutes.....	8-10
Gap Fill, Inches: .....	0.25
Temperature Range .....	-40F - +250F

## Application and Handling Guidelines

The product is best used at temperatures between 65 °F and 80 °F. Temperatures below 65 °F will slow the cure speed of the material and viscosities will be higher. Temperatures above 80 °F will cause the material to cure faster and viscosities will be lower. For consistent dispensing maintain temperature in the above mentioned range.

For optimum bond strength and to insure maximum performance in the finished assembly, join parts together within the specified work time of the adhesive. Make sure the bond joint has uniform coverage and that a sufficient amount of adhesive is in the bond area. It is important to have the adhesive applied, parts aligned and positioned, within the established work times for the product. To ensure maximum performance in the finished assembly parts should remain undisturbed until the fixture time is reached.

Clean up is best before the adhesive has cured. Cleaners containing NMP (N-methyl pyrrolidone) or Citrus terpene provide the best results. On cured adhesive repeat use may be required.



### **Precautions**

Vibra-Tite PB405 is *flammable*. Keep away from heat, spark, and open flames. KEEP OUT OF REACH OF CHILDREN. THE PRODUCT IS FOR INDUSTRIAL USE ONLY. Keep containers closed when not in use. Avoid contact with skin and eyes. Harmful if swallowed. Refer to Material Safety Data Sheet for complete safety information.

### **Storage and Shelf Life**

The shelf life of the Vibra-Tite PB405 is 12 months from date of shipment. Shelf life is based on the products being stored properly at temperatures between 55 °F and 75 °F. Exposure to temperatures above 75 °F will reduce the shelf life of these materials. These products should NEVER BE FROZEN.

### **Note**

The data are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is recommended that the product be tested in the application for which it is to be used.

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