

Vibra-Tite® PB310 Structural Adhesive

August 2020

Product Description

Vibra-Tite PB310 is a high-performance two-part methacrylate adhesive engineered to bond a wide range of materials including metal and plastics, especially fiberglass. It offers outstanding bond strength, is extremely durable, with excellent impact and weathering properties. Vibra-Tite PB310 greatly increases the reliability of finished assemblies with exceptional toughness, 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 PB310 is suitable for bonding combinations of the following substrates

Metals

- Aluminum
- Steel
- Stainless
- Coated Metals

Thermo Sets

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

Thermoplastics

- Acrylics
- ABS
- Polycarbonate
- PPOs
- PVC
- 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	40,000 – 80,000
Activator	$\dots 100,000 - 140,000$
Color	.Black, Cream or White
Specific Gravity	1.03
Mix Ratio:	
By Volume	1 to 1
	1 to 1
Thixotropic Index	4 - 5
Flash Point	51°F

Cured

Shear Strength, psi	1750-2800
Tensile Strength, psi	2500-3500
Work Time, Minutes	8-15
Handling Strength, Minutes	18-25
Gap Fill, Inches:	0.25
Temperature Range	60F - +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 acetone or Citrus terpene provide the best results. On cured adhesive repeat use may be required.



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Precautions

Vibra-Tite PB310 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 PB310 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

This data is 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.

Vibra-Tite is a registered trademark of ND Industries, Inc.