Technical

Data Sheet

FRP - Fiber Reinforced Polymer

PREMIUM VERTICAL ADHESIVE



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ISO 9001:2015 Compliant **Quality Management Systems**





10.2 fl oz (Clear) Not all styles/sizes/colors available in all areas.

PRODUCT DESCRIPTION

FIBER REINFORCED POLYMER (FRP) VERTICAL ADHESIVE is a unique NON-SAG PREMIUM adhesive. This adhesive will not sag, drip or run and is excellent for use in applications requiring vertical and horizontal hold. FRP Vertical Adhesive is waterproof and withstands temperatures from -40 to 180 °F (-40 to 82 °C), allowing it to maintain its extreme bond and flexibility—even in extreme weather conditions! FRP dries clear and is paintable and sandable!

WHERE TO USE / APPLICATIONS

- cracks in vertical brick & mortar
- **HVAC** systems maintenance
- roof flashing/shingles maintenance
- and much more!

FEATURES AND BENEFITS

PAINTABLE – paint to match surrounding area or make UV resistant after fully cured

SANDABLE – sand adhesive overage for smooth column surface

WATERPROOF – impervious to water after complete cure so works great outdoors

NON-FLAMMABLE

TECHNICAL INFORMATION

PROPERTIES			
UNCURED MATERIAL			
Color:	Clear		
Solvent:	Perchloroethylene		
Non-flammable:	Yes (cured and uncured material)		
Density:	11.0 +/-0.1 lbs/gal		
Solids	30% by weight, 40% by volume		
Viscosity:	Non-sag; 1,000,000 cps		
Tack time:	~ 4 minutes		
Set time:	20 minutes*		
Full cure time:	Thin film: 24 hours / Thick film: 48-72 hours		
Storage:	rage: Ideal temperature range: 50 to 90 °F (10 to 32 °C). Product may thic		
	when stored in colder temperatures. If product thickens from colder		
	temperatures, warm to room temperature before use.		
Application Temp:	Ideal application temperature range is 50 to 90 °F (10 to 32 °C).		
Freeze/thaw stability:	Stable, allow product to warm to room temperature before using		
Shelf life:	2 year (unopened)		
*Depending on material, humidity and temperature.			

CURED MATERIAL			
Chemical resistance:	Excellent to water, dilute acids and dilute bases		
Hardness:	80 Shore A		
Dielectric strength:	400V/mil (ASTM D-149); this is the maximum voltage that can be applied		
	to a given material without causing it to break down.		
Tensile strength:	3800 lb/in ² (ASTM D-412)		
Elongation:	900% (ASTM D-412)		
Temperature range:	Fully cured adhesive can withstand temperatures from -40 to 180 °F (-40		
	to 82 °C) intermittently .		
UV resistance:	Paint-over or use E6800.		
Paint-over time:	24 hours		

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STRENGTH TEST				
	FRP Split Columns	Polyurethane Foam		
ADHESIVE	(non-load bearing columns)	(capital material)		
FRP PREMIUM COLUMN ADHESIVE	43	54		
PL Polyurethane*	21	19		
PL-400 Construction Adhesive*	36	25		

180° Peel Test based on ASTM D 903 (November, 2007)

Avg. Max. Load Measure in Lb. F/in. (pounds per square inch)

CHEMICALS THAT HAVE LITTLE OR NO EFFECT ON FRP – Fiber Reinforced Polymer

Acetic acid (5% and 10%) Ammonium hydroxide (3.4%) Ammonium nitrate (50%)

Antifreeze

Beer (3.2% alcohol by volume)

Boric acid (3.1%) Distilled water Hydraulic oil Lactic acid (3.8%)

Milk (fresh, tested at 40 °F)

Motor oil (30w)

Nitric acid (10% and 20%)

Oxalic acid (3.1%)

Phosphoric acid (30% and 60% as P_2O_5)

Potassium hydroxide (3.4%) Sodium carbonates (2.7%)

Sodium chloride (10%)

Sulfuric acid (3% and 10%)

Wine (20% alcohol by volume)

FRP exhibits excellent resistance to water, dilute acids and dilute bases. Thin films of FRP were immersed in various chemicals for two weeks and exhibited weight gains of less than 2% and tensile strength loss of less than 10%. These chemicals are listed on the left. All percentages are given by weight unless otherwise noted.

SOLVENTS THAT DISSOLVE FRP – Fiber Reinforced Polymer

Chevron solvent 1100 Chlorothane NU Cyclohexane Gasoline Methylene chloride Perchloroethylene

Toluene 1, 1, 1-Trichloroethane

Propyl acetate

These are common solvents that dissolve FRP when hardened samples were immersed. The dissolution with these solvents was not instantaneous and therefore does not preclude usage in all cases. Applications were an occasional splash or brief exposure is expected may be acceptable. Test a small area before full use.

^{*}Competitor products

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DIRECTIONS and APPLICATION NOTES

Read directions and test small area before use.

- Step 1 Surface should be clean, dry and free of dirt. For best results, lightly roughen surface before use.
- Step 2 Trim end of nozzle. Puncture inner seal.
- Step 3 Product can be applied between 50 and 90 °F / 10 and 32 °C.
- Step 4 Apply directly to surfaces to be bonded or repaired. Allow 24 hours for curing—Maximum bond strength may not be reached for up to 72 hours.
- Step 6 Clean uncured adhesive with acetone or citrus-based solvents. Cured material may be removed by cutting or scraping. For prolonged storage after opening, cover or plug the opening of the nozzle.

Product is paintable and immediately resistant to precipitation upon application.

For technical assistance, call 800.767.4667.

HEALTH and SAFETY

This product contains perchloroethylene. Before working with this product, read and become familiar with information concerning hazards, proper use and handling.

To request a hard copy of the SDS, please send an e-mail to sds@eclecticproducts.com.

LIMITED WARRANTY

The product is warranted against any defect in materials or workmanship under normal use for a period of 180 days after the date of purchase. The product is also warranted under any implied warranties provided under applicable state law, including, without limitation, the implied warranty of merchantability and the implied warranty of fitness for a particular purpose, for a period of 180 days after the date of purchase. This warranty covers only the original buyer of the product. For warranty service, the buyer should contact the store where the product was purchased, or write Eclectic Products, Inc., P.O. Box 4450, Pineville LA 71361 or call 800.767.4667. This warranty gives you specific legal rights, and you also have other rights, which vary from state to state.