

V-Wrap 700 - Adhesive Resin

PHYSICAL PROPERTIES:

VOC Content:	No VOC
HAP Content:	No HAP
Density:	8.78 lbs/gal (1.1 kg/L)
Tensile Strength (ASTM D638):	9,000 psi (62 MPa)
Tensile Modulus (ASTM D638):	500,000 psi (3,450 MPa)
Elongation at Break (ASTM D638):	2.0%
Flexural Strength (ASTM D790):	16,000 psi (110 MPa)
Flexural Modulus (ASTM D790):	450,000 psi (3,100 MPa)
Elongation at Break (ASTM D638):	2.0%
Compressive Strength (ASTM D695):	19,000 psi (131 MPa)
Compressive Modulus (ASTM D695):	500,000 psi (3,450 MPa)

Description:

V-Wrap 700 Resin is a 100% solids, vinyl ester based resin. It can also be used for elevated temperature applications for which typical solvent-based resins cannot be used.

V-Wrap 700 Resin is an environmentally friendly product with no Volatile Organic Compounds (VOC) and no Hazardous Air Pollutants (HAP), Solvents free and minimum odor. The resin is perfect for healthcare, hospitals, schools, industrial and highly populated areas as well as food and drug industries.

As part of the V-Wrap 700 Resin systems it can be UV cured for faster installation and reduce interruptions to facilities and their operations. A UV catalyst is added at the time of premix. The ratio is 3 oz. UV catalyst to 1 gal. V-Wrap 700 Resin.

Product Uses:

V-Wrap 700 is a multi use resin, it performs as a primer, tack coat/putty and saturate for the V-Wrap Carbon Fiber Systems. For detailed uses see installation guides for V-Wrap strengthening systems. Fume Silica may be added to thicken the resin. The maximum ratio by volume is 1.5 Fume Silica to 1 part resin.

Application Information

Surface Preparation:

V-Wrap 700 Resins should be applied to substrates that are dry, exhibit an open pore structure and are free of dust; oils or other surface contaminants or bond inhibiting materials.

Basic Application Equipment:

Application processes for V-Wrap 700 Resin will require mixing drill, mixing paddle, ¼" nap rollers, steel rollers, paint brushes, trawls and saturator.

Mixing:

Mixing ratio: 1 gallon part A to 1 bottle (3 oz) Part B (or fractions thereof)

Part A must be mechanically premixed separately for 2 minutes. After premixing, blend Part A and Part B with a mechanical mixer for 2 minutes until a homogeneous mixture is achieved.

Approximate Pot Life:

40 min at 77°F (25°C)

Coverage Rates:

As a Primer:

Concrete:	250 ft ² /gal (6.1 m ² /L)
Masonry: (Concrete)	125 ft ² /gal (3.0 m ² /L)
Masonry: (Clay)	200 ft ² /gal (4.8 m ² /L)

As Putty/Tack Coat:

Filler: 60 ft²/gal (1.5 m²/L)
(Depending on surface roughness)

As Saturant:

V-Wrap C100	80 ft ² /gal (1.9 m ² /L)
V-Wrap C100 G	80 ft ² /gal (1.9 m ² /L)
V-Wrap C150 G	70 ft ² /gal (1.7 m ² /L)
V-Wrap C180/C200	60 ft ² /gal (1.5 m ² /L)

Coverage rates may vary based on installation procedure and fabric type. Contact a V-Wrap representative for coverage rates.

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Limitations:

Only apply V-Wrap 700 Resin when the ambient temperature is between 40° and 100° F (4° to 38°C). Topcoat selection should be based upon requirements for protection from environmental exposures, aesthetics, and fire protection/burn characteristics.

Clean Up:

Use methyl ethyl ketone or acetone. Observe fire and health precautions when using solvents.

Observe Working Time Limitations:

Mix no more material than can be applied within the work time period. Available work time, temperature and complexity of the application will determine how much material should be mixed at one time. Keep material cool and in shaded area, away from direct sunlight in warm weather. During hot weather, work time can be extended by keeping the material cool before and after mixing or by immersing the pot in ice water.

Handling Properties:

Mixed Viscosity: at 77°F (25°C) 1500 cps
 Color:
 Part A Blue
 Part B Clear
 Mixed Blue

Shelf Life:

Stored at 70°F (21°C): 12 months (Parts A and B)

Packaging:

	Volume	Weight	Package
Part A	4 gal.	35 lbs	5 gal. pail
Part B	12 fl. Oz.	12 oz.	4-3 fl. oz. bottle

Storage:

Store in a cool, dry area (50° and 90°F (10° to 32.2°C)) away from direct sunlight, flame or other hazards.

SAFETY:

WARNING: Vapor may be harmful. Contains vinyl ester resins and curing agent. May cause skin sensitivity or other allergic responses. Keep away from heat, sparks or open flame. In enclosed areas or where ventilation is poor use an approved air mask and utilize adequate safety precautions to prevent fire or explosion. In case of skin contact, wash with soap and water. For eyes, flush immediately (seconds count) with water for 15 minutes and CALL A PHYSICIAN. If swallowed, CALL A PHYSICIAN IMMEDIATELY.

HANDLING:

Use of approved personal protection equipment should be worn at all times. Particles mask is recommended when handling airborne particles. Gloves are recommended when handling fabrics and resins to avoid skin irritation. Safety glasses are recommended to prevent eye irritation. Wear chemical resistant clothing /gloves/goggles. Ventilate area. In absence of adequate ventilation, use properly fitted NIOSH respirator. Product Material Safety Data Sheets (MSDS) are available and should be consulted and on hand whenever handling these products.

These products are for professional and industrial use only and are on installed by trained and qualified applicators. Trained applicators must follow installation instructions.

Maintenance:

Periodically inspect the applied material and repair localized areas as needed. Consult a V-Wrap representative for additional information.

VStructural LLC. warrants its products to be free from manufacturing defects and to meet VSL's current published properties when applied in accordance with VSL directions and tested in accordance with ASTM and VSL Standards. User determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product and excludes labor or the cost of labor. Any claim for breach of this warranty must be brought within one year of the date of purchase.

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