

BuildSecure

Multi-Purpose Construction Adhesive

Technical Data Sheet

Polyether Technology

CSI Section No. 06191

CHEM LINK

Construction & Maintenance

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Product Description

BuildSecure is a fast setting, structural adhesive designed for various “panel on frame” assemblies in commercial and residential construction.

BuildSecure can achieve wood tearing bonds in less than four hours at 72°F (22°C). The speed of set and ultimate shear strength make BuildSecure ideal for shear wall construction and roof assemblies in a production setting where timing is of critical importance.

The “green strength” and ultimate 400+ PSI shear strength, of this adhesive permits floor decks, shear-walls and roof assemblies to be bonded to each other, forming a rigid “airframe” type construction with strength in all directions.

BuildSecure is capable of filling gaps and forming bonds on irregular surfaces without shrinking.

BuildSecure is a solvent free, non-flammable, moisture curing adhesive. It complies with all OSHA, State, Local and Federal air quality regulations. This adhesive is noncarcinogenic and complies with California Proposition 65.

Regulatory Compliance

- ASTM C557
- Conforms to OTC Rule for Adhesives
- Meets requirements of California Regs: CARB, BAAQMD and SCAQMD
- This product does not contain cancer causing chemicals listed in California Proposition 65
- Conforms to USDA Requirements for Non-food Contact

Advantages

- 100% VOC compliant
- Tough elastomeric bonds
- Non-flammable
- Solvent free
- Fast settings
- High adhesion
- Non-carcinogenic

Color

Tan

Packaging

- 10.1 oz (300 ml)
24 cartridges/carton, 45 cartons/pallet
- 28 oz (825 ml)
40 cartons/pallet
- 2 and 5 gallon pails or 50 gallon drums
available by special order



Green Standards:

- LEED 2.2 for New Construction and Major Renovations: Low Emitting Materials (Section 4.1) 1 Point
- NAHB Model Green Home Building Guidelines: 5 Global Impact Points
- VOC Content: less than 32 grams / liter ASTM D2369 EPA Method 24 (tested at 240°F / 115°C)



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Basic Uses
Bonding conforming subfloor structures
Bonding roof and wall sheathing to wood and metal stud
Installing EPS foam insulation
Wood to metal assemblies
Installing cabinetry and sink tops
Installing "tack strip" to secure carpeting
Structural insulated panels (SIPs)
Gap filling or bridging

Typical Uncured Properties		
Gun Grade	Zero Slump	
Viscosity	900,000 cp +/- 300,000 cp	Brookfield RVF TF Spindle, 4 RPM, 73°F (23°C)
Density	13.2 +/- 0.2 lbs per gallon	ASTM D1475
Tack Free Time	20 +/- 10 min	45 +/- 5% R.H.
VOC Content	<32 grams / liter	ASTM D2369

Compatible Substrates*
Galvanized Metal
Aluminum
Engineered Plastics, PVC
Expanded Polystyrene (EPS)
Fiberglass FRP
Wood
EPS Foam
Drywall
Gypsum

Typical Cured Properties		
Shear Strength	411- 460 psi	ASTM D1002
Low temp. flex	Pass -10°F (-23°C) 1/4 inch mandrel	ASTM D816
Shrinkage	No visible shrinkage after 14 days	
Service Temperature	-40°F to 200°F (-40°C to 93°C)	

**Test and evaluate to ensure adequate adhesion.*

Application Guidelines:

Bonding surfaces must be clean, dry and free of dirt, debris, oil, rust and contamination that would interfere with adhesion. Clean metal and painted surfaces with alcohol or ammonia water. DO NOT USE petroleum solvents such as mineral spirits or xylene. Abraded surfaces are acceptable but must be clean, sound and free of manufacturing defects.

Maintain **BuildSecure** at room temperature before applying to ensure easy gunning and tooling. Test all substrates for strength and compatibility. Do not use on olefins such as polyethylene, polypropylene or TPO.

BuildSecure is a gun grade mastic that is applied from caulking cartridges, or through pumping equipment from pails and drums. Pump ratios of at least 40:1 are required for air driven application equipment. Pumps must have lift systems and sealed follower plates. All pumping equipment must be clean and free of water or moisture before using. Drum's and pail's must be quickly protected from atmospheric moisture when opened. Guns, pumps and hoses must be sealed when not in use. Butyl, Viton, or Teflon pump seals are required. Polypropylene or Teflon lined hoses are specified for use with polyether based products.

Application temperature range is 32°F to 110°F (0°C to 44°C) with optimum application from 60°F to 100°F (16°C to 38°C). Low humidity or low temperature hinder curing. High humidity or high temperature accelerate curing.

BuildSecure is a non-slump mastic that can be used on horizontal, vertical, or overhead applications. Bead sizes from 1/16 to 1/4 inch diameter are used for various sized bonds. Optimum glue line thickness is 15 mils. Do not leave beads unassembled for more than twenty minutes. Bonds can be set and fixtured with nails, screws or staples until adhesive sets.

BuildSecure will not shrink. **BuildSecure** may be used to fill voids around bulkhead penetrations, or for installing windows and doors. Fill the joint or void and tool to a smooth surface. Do not use on exterior surfaces. Mask off areas as required to protect decorative surface finishes.

Priming

In most instances **BuildSecure** will not require a primer. However, certain applications or substrates may require a primer to ensure a long lasting bond and weatherproof seal. It is the applicator's responsibility to determine the need for a primer. CHEM LINK recommends a primer be used for any application where prolonged immersion is anticipated.

Metal

Prepare all metal to ensure maximum adhesion. Remove all rust, scale and residue by wire brushing to a bright metal sheen. Remove films, loose or inappropriate coatings and oils with an appropriate solvent such as alcohol.*

**CHEM LINK recommends that coated substrates be tested for adhesion prior to starting a project. Please contact Technical Services for specific application guidelines and recommendations.*

Wood

Wood should be clean, sound and dry prior to sealant application. Allow treated wood to weather for six months prior to application. Remove all coatings and paint (or test for compatibility) to ensure proper bonding. Do not use on fire retardant lumber.

Clean-Up

Wet sealant can be removed using a solvent such as alcohol. Cured **BuildSecure** can be removed by abrading or scraping the substrate.

Storage

Store original, unopened containers in a cool, dry area. Protect unopened containers from water, heat and direct sunlight. Elevated temperatures will reduce shelf life. **BuildSecure** will not freeze.

Shelf Life

Twelve months from date of manufacture when stored at 70°F / 21°C with 50% relative humidity. High temperature and high relative humidity may significantly reduce shelf life.

Pails have a shelf life of six months.

Caution

Avoid prolonged contact with skin. Uncured adhesive irritates eyes. In case of contact with eyes immediately flush with water. Call a physician. Please refer to the SDS for first aid information.

See www.chemlink.com for most current SDS .

KEEP OUT OF REACH OF CHILDREN.

Limitations

- In areas where prolonged chemical exposure is anticipated, contact Technical Services for recommendations.
- Allow treated wood to "cure" for six months prior to application per APA guidelines.
- Do not use in areas subject to continuous immersion.
- Do not store in elevated temperatures.
- Remove all coatings and sealers before application.
- Please contact customer service for application guidelines with temperatures below 32°F (0°C).
- Test and evaluate all paints before application.
Polyurethane and oil based paints may dry slowly.
- Does not bond to Kynar 500® PVDF coated metals.



NOTES:



Contractor Hot Line

800-826-1681

www.chemlink.com



All properties described in this document are derived from testing conducted in laboratory conditions. Properties and performance will vary depending on environmental conditions and application technique. Test and evaluate to determine appropriate usage. Visit www.chemlink.com for the Safety Data Sheet, Technical Data Guides and full warranty for this product.

LIMITED WARRANTY: **CHEM LINK** warrants this product's performance, provided it is properly stored and applied within 1 year. If this **CHEM LINK** material is proved to be defective, return remaining product and purchase receipt for refund or replacement of product exclusive of labor or cost of labor. This is the sole and exclusive remedy for defects or failure of this product. User must read and follow the direction of the current Technical Data Guide and SDS prior to product use. User determines suitability of product for intended use and assumes all risks. Manufacturer shall not be liable for damages (including consequential or incidental damages) in excess of the purchase price, except where such exclusion or limitation is prohibited by state law. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESS OR IMPLIED INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; except for the above express warranty given by manufacturer, the product is sold with all faults. **CHEM LINK** SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. This warranty gives you specific legal rights, and you may also have other rights in the U.S. which vary from state to state. For warranty claim information, call 800-826-1681.