

Introducing QUICKBOND™ AB2750-EFB – An Eco-and Health Friendly Water-Based Contact Adhesive for Bonding EPE, EPP Foams

AIT Chemical launches Quickbond™ AB2750-EFB, a water-based contact adhesive for bonding difficult-to-bond EPE and EPP foams to other foams and substrates.

PRINCETON, NJ, UNITED STATES,
November 9, 2025 /EINPresswire.com/
-- [AIT Chemical, Inc.](#) proudly announces the launch of Quickbond™ AB2750-EFB, an innovative and pioneering [water-based contact adhesive](#) engineered for bonding the notoriously difficult to bond EPE and EPP foams to itself, other foams, and almost all substrates.

Polyethylene foam is used in the packaging industry and for specialty applications that require foams with higher stiffness and strength, while maintaining stress absorption for article protection. Polyethylene foam or expanded polyethylene foam, and similarly the analog expanded polypropylene foam, are challenging to bond to themselves and other substrates due to the material's non-porous (closed cell foam) and its inherently low surface energy.

The conventional method for bonding polyethylene foam involves using specialty solvent-based rubber cements or specialty hot-melt adhesives. With the drive to VOC-free manufacturing, the industries have been searching for a water-based contact adhesive solution for bonding these non-polar EPE and EPP foams.

Inherently, there is an incompatibility for water-based contact adhesives with non-polar substrates, whether they are expanded or simply thermoplastic polyethylene. Even the best-in-class provides only a reasonable bond strength for foam-to-foam and foam-to-wood, paper, plastic, and metal bonding. The common comments for the best-in-class water-based foam



Based Substrate	EPE (Expanded Polyethylene, Crosslinked and Non-Crosslinked) Foams					PU-EVA-Latex Open-Cell Foams		
Bonding Foam or Substrate	EPE (Expanded Polyethylene) Foams (Soft and Hard)	Wood/ Paper/ Porous	PU-EVA-Latex Open-Cell Foams	Styrofoam and Closed-Cell Foams other than EPE	Plastics (Except PTFE, Silicone), Metals, Concrete, Ceramics	Woods, Paper and Porous	Plastics, Metals, and Non-Porous	PU-EVA-Latex Open-Cell Foams
AB2750-EFB (Contact time to reach handling Bond Strength)	Instant (within 10 Seconds)	Instant (within 10 Seconds)	Moderate-Fast (within 5-15 minutes)	Moderate-Fast (within 5-15 minutes)	Moderate-Fast (within 5-15 minutes)	Fast (within 60 Seconds)	Moderate-Fast (within 5-15 minutes)	Moderate-Fast (within 5-15 minutes)
AB2750-EFB Shear Bond Strength (Push foam from substrate)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)
AB2750-EFB Peel Bond Strength (Peel foam from substrate)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)	Cohesive Failure (Adhesive stronger than foam)

AB2750-EFB is a water-based contact adhesive cement engineered for compatibility and proven for bonding polyethylene-based foam and substrates such as expanded Polyethylene (EPE) foam (soft and hard) to itself and other foams and substrates. The engineered compatibility enables the water-based adhesive to spread evenly and adhere to EPE and other substrates for bonding applications. **AB2750-EFB is proven to have water resistance once dried and cured.**

Expanded polyethylene (EPE) foam being non-polar is notoriously hard for water-based contact adhesive to form good bonding. AB2750-EFB is the only known water-based contact cement engineered to provide instant green tack in minutes for EPE foam to substrate bonding.

adhesive are as follows: "However, as with all water-based adhesives on polyethylene, testing for your specific application is recommended to ensure sufficient bond strength." "While it adheres to many foams and plastics, polyethylene's surface may still present adhesion challenges, so trial application is essential." "Like all water-based options, it may require surface preparation or priming for best results on polyethylene foam."

(<https://www.perplexity.ai/search/water-based-adhesive-for-bonding-c4GTD.fmROCzuHb5YS.ExA>)

AB2750-EFB is the result of extensive development by the expert polymer chemist and physicist team at AIT Chemical, Inc., following its acquisition of Coral Industries, which has been involved in solvent-borne and water-based contact adhesives since 1968. "By modifying the molecular structures of the water dispersion polymers, QUICKBOND™ AB2750-EFB is the first water-based contact

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QUICKBOND™ AB2750-EFB is the first water-based contact adhesive that can bond EPE foam to itself and other substrates with a bond strength stronger than the EPE base foam”

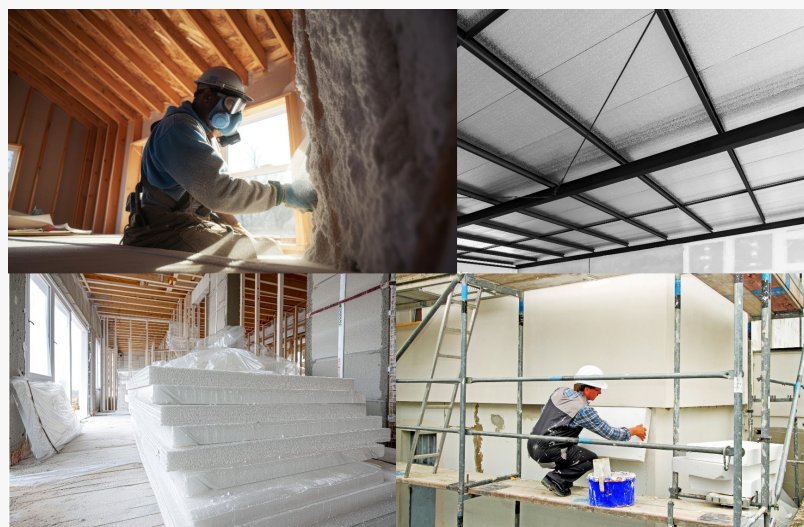
Dr. Kevin Chung

adhesive that can bond EPE foam to itself and other substrates with a bond strength stronger than the EPE base foam", stated Dr. Kevin Chung. This innovative water-based contact adhesive technology, for the first time, enabled the EPE and EPP foam industries to operate in a fire-hazard-free, low-odor, eco-friendly, and healthy environment while meeting numerous governmental mandates for VOC emissions in manufacturing.

EPE/EPP foam bonding contact adhesive, QUICKBOND™ AB2750-EFB, has the potential to expand the use of eco-

friendly foams in various building industries for thermal insulation and water damage protection. With the innovative manufacturing of EPE foams and their inherently high strength, impact resistance, and lightweight properties, along with their inherent water and moisture protection capabilities, they are ideally suited for thermal insulation and water protection applications in the building and related industries. With the ability to use water-based contact adhesive to attach large panels and large-area EPE foam sheets, many applications can now be constructed without concerns for VOC and health risks to users.

Sprayed foam for thermal insulation, which must be performed with professional wear of



An eco-and-health friendly water-based contact adhesive that can attach large areas and/or curved surfaces along with its inherently extra light weight expanded polyethylene foams enable the possibility for do-it-yourself thermal insulation.

extensive protection gear, can now utilize clean EPE (and EPS) foam panels with [QUICKBOND™ AB2750-EFB water-based contact adhesive](#) for DIY possibilities and ease of application. EPE may have an advantage over EPS in terms of toughness without breakage, even in rough handling and applications on curved areas. Its inherent water and moisture barrier capability provides additional protection beyond the thermal barrier.

Compatibility Matching between Foam Adhesive and Foam Material Chemistry for Long-Lasting Strong Bonding:

Whether it is for high-volume manufacturing, professional, or DIY projects, selecting the right foam adhesive for bonding is crucial for success. Compatibility matching is vital for achieving consistent, long-lasting bonding and bond strength, whether the adhesive is used to bond foam to itself to form a thicker layer or to bond foam to wood, paper, plastics, or metals.

Almost all foam types, except one: expanded polyethylene or cross-linked expanded polyethylene (EPE) foam, can be used with water-based foam, acrylic, polyurethane, or chloroprene types of foam adhesive. The choice is the speed of foam tacking and achieving handling bond strength until the water-based adhesive is fully set, typically 2-24 hours, depending on the specific foam types and density, with different capillary water extraction. QUICKBOND™ AB2750-EFB is designed to provide both high compatibility in bonding both notoriously difficult to bond EPE and EPP foams, as well as more traditional PU, EVA, and memory foams, all with fast tacking and bond strength build-up. This high degree of compatibility in bonding both polar and non-polar, as well as closed-cell and open-cell foams, can be exploited and explored for previously impossible combinations in different application environments.

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Having the new capability to use the eco-friendly water-based contact adhesive, QUICKBOND™ AB2750-EFB to bond EPE, EPP and all other foam types, leathers and fabrics as well as to bond to substrates such as wood, plywood, concrete, metals, and other non-polar substrate.

This press release can be viewed online at: <https://www.einpresswire.com/article/865711785>

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