

New water-based adhesive offers both strength and speed

To meet the needs of customers who want the speed and strength of solvent-based adhesives without their unfavorable safety and environmental profile, 3M has developed a new water-based product called 3M™ Fast Tack Water Based Adhesive 1000NF.

“To create 3M Fast Tack Water Based Adhesive 1000NF, product developers and scientists went outside the box to design a new kind of sprayable adhesive. It isn’t just a reformulated product or line extension,” explained Lyle White, Marketing Manager, Sprayable Adhesives, Industrial Adhesives and Tapes Division. “3M has never before offered a one-part water based adhesive that has combined this level of performance with very fast tack times, and we feel it’s not only unique to us but unique to the market as well.”

Potential ‘game changer’

Solvent-based adhesives are popular with industrial users because bonds can be made quickly and they have good adhesion performance. However, they also come with drawbacks including flammability and the potential for exposure to volatile organic compounds (VOCs).

Many customers from industries like furniture manufacturing, woodworking, foam bonding, and specialty vehicle manufacturing would prefer water-based adhesives, but these products have often been perceived as offering inferior speed or inferior strength. 3M Fast Tack Water Based Adhesive 1000NF is specially designed to address these concerns by providing a unique combination of fast bonding, repositionability and high ultimate strength. These characteristics have never before been captured with just one product, which positions this product as a “game changer” in the market.

“Many of our customers have been waiting for a fast water-based adhesive, and early feedback has reflected a sense of excitement around the product,” said White. “We are giving our customers something they’ve wanted for a long time.”

Materials make the difference

The new adhesive’s high level of performance is due to its use of a proprietary 3M technology for creating pressure sensitive adhesives (PSAs). Similar to PSA tape, 3M Fast Tack Water Based Adhesive 1000NF becomes tacky quickly for forming immediate bonds. It then leverages proprietary cross-linking technology, which builds even more strength with time.

Depending on the materials being joined, the adhesive can achieve handling strength almost instantly, yet remain repositionable while still wet. Furthermore, it is non-flammable, contains zero VOCs* and is GREENGUARD Children and Schools Certified^(SM), adding additional benefits over traditional solvent-based options.

“3M Fast Tack Water Based Adhesive 1000NF offers the best of both worlds,” said White. “It’s fast, strong and repositionable, yet safer for users and the environment.”

For more information, please visit 3M.com/1000NF.

*0% VOC is based on tests per EPA method 24.

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