



Technical Data Sheet

3M™ Fast Tack Water Based Adhesive 1000NF



[Product Details](#)



[Regulatory Info/SDS](#)

Product Description

3M™ Fast Tack Water Based Adhesive 1000NF is a high performance water-based, one part adhesive formulated for fast bonding and long term heat resistant bonds. Adheres to many types of flexible foam, latex foams, fabric, polyester fiberfill, wood, plywood, particleboard and many plastic and metal surfaces.

Product Features

- Fast bonding. Depending on substrates, handling strength bonds can be made without complete drying.
- Repositionable while adhesive is wet and aggressively tacky.
- Long term stable bonds. Good heat resistance.
- Bonds most foamed plastics, plastic laminates, wood, plywood and canvas to themselves and to each other. Performs best when at least one substrate is porous.
- Non-flammable in the wet state.
- Contains no polychloroprene.

Certified to GREENGUARD® Product Emission Standard For Children and Schools(SM) for low emitting interior building materials:



- Addresses or Contributes to LEED® EQ Credit 4.1: Low Emitting Materials: Adhesive and Sealants
- Addresses or Contributes to LEED® EQ Credit 4.5: Low Emitting Materials: Furniture and Furnishings
- Addresses or Contributes to LEED® EQ Credit 4.6: Low Emitting Materials: Ceiling and Wall Systems

Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Uncured Physical Properties

| Attribute Name | Value |
|----------------|------------------|
| Density | 8 to 9 lb/gal |
| Base | Acrylic Emulsion |

Typical Physical Properties

| Attribute Name | Temperature | Value |
|--------------------------|---------------|------------------------------|
| Color | | Neutral, Purple |
| Solids Content by Weight | | 46 to 51 % |
| pH | | 4.5 to 6 |
| Bonding Range | | 1-10 min |
| Viscosity | 22 °C (72 °F) | 400 to 1,100 cP ¹ |

¹ Brookfield RVF # 3 sp at 30 rpm

| Attribute Name | Value |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| *Note | <p>3M™ Fast Tack Water Based Adhesive 1000NF is intended for use in a wide variety of applications. Coverage and application procedure will vary for each use. User should test for suitability with their process and performance requirements.</p> <p>In general, key considerations when using 3M™ Fast Tack Water Based Adhesive 1000NF are:</p> <ul style="list-style-type: none"> • Ensure adequate adhesive is applied over the entire area to be bonded. This may mean an additional coating is required. • Bonds should be made when the adhesive feels aggressively tacky. • Apply sufficient pressure to ensure good contact between the surfaces. See Application Tips & Tricks Pamphlet for more information. |

Typical Performance Characteristics

| Attribute Name | Value |
|------------------------------------|----------------------|
| Shear Adhesion Failure Test - SAFT | >300 °F ¹ |

¹ SAFT Shear Adhesion Failure Test with birch plywood, 1 inch overlap, 100 grams used, temperature start at 90°F and ramped 10°F every 10 min. until complete failure.

Handling/Application Information

Directions for Use

Bonds can be made by applying 3M™ Fast Tack Water Based Adhesive 1000NF to one or both of the surfaces to be bonded. For maximum strength, apply to both substrates. For lighter duty uses, application to only one surface may be acceptable. Single surface application may require heavier coverage and longer dry time. User should evaluate the adhesive to determine which method(s) is suitable for their use. Bonds to porous substrates can generally be made without significant drying, typically <30 seconds depending on environmental factors and adhesive coverage. Non-porous substrates need to dry until tacky to touch.

All applications benefit from attention to:

1. Surface Preparation: Use only on clean, dry surfaces. Contamination of surfaces with oil, grease or release agents will prevent good, strong bonds.
2. Application: Adhesive does not require agitation before use. Adhesive can be brushed, rolled or spray applied. The quickest bonds can be made through spray application. Adjust the spray equipment to give a fine, mist-like spray pattern. Spray a uniform, light coat of adhesive to one or both surfaces holding spray applicator 10-15 inches from

surface.

3. Coverage: Coverage will depend on the surface porosity of substrates, and strength of adhesive bond required. In all cases, user evaluation will be required to determine the optimum coverage levels.

Note: Application of adhesive at high coating weights or using a coarse spray pattern may result in longer activation times.

4. Activation Time: The adhesive may activate sufficiently to permit making bonds within 30 seconds after application when bonding porous substrates.

Bonds such as foam or fabric to smooth, nonporous surfaces such as plastic or metal will require longer activation times. In general, bonds should be made when the adhesive coating feels aggressively tacky. This time is dependent on the amount of adhesive applied. Bonds may be made up to 1 - 10 minutes after application depending on ambient temperature and humidity conditions. See Note above.

5. Assembly and Bonding: Pressure sufficient to assure the substrates make contact should be applied to the bond line by manual or mechanical methods.

6. Cleanup: Wet adhesive may be removed with water containing a small amount of vinegar.* Follow with a flush of clean water. Dry adhesive may be removed with a combination of 3M™ Adhesive Remover Low VOC <20% or 3M™ Citrus Base Cleaner** or equivalent and mechanical systems such as wire brushing. Dry adhesive cannot be removed from porous surfaces such as foams or fabrics.

*Cleaning Solution: One part vinegar to five parts water.

****Note:** When using solvents, extinguish all ignition sources, including pilot lights, and follow the manufacturer's precautions and directions for use.

Application Equipment

Appropriate application equipment can enhance adhesive performance. We suggest the following application equipment for the user's evaluation in light of the user's particular purpose and method of application.

| Equipment Type | Equipment Example | Air Cap | Atomizing Air Pressure | Fluid Tip | Fluid Pressure |
|-----------------------------------|---------------------|---------------|------------------------|-----------|----------------|
| Pressure Fed Hand Held Spray Guns | US Legends 95T | 0.070" Tomado | 20-30 psi | 66SS | 10-20 psi |
| | Binks 95, 2001,2010 | 66SD Fan | 20-30 psi | 66SS | 10-20 psi |
| | Binks 95, 2001,2010 | 66R Cone | 20-30 psi | 66SS | 10-20 psi |

*Systems other than those listed can be used with 3M™ Fast Tack Water Based Adhesive 1000NF. Existing spray equipment can also be adapted. Fluid hoses used previously with solvent-based adhesive or cleaning compounds must be replaced with new hose. Be sure to follow the equipment manufacturer's precautions, directions for use, and recommendations for such equipment. For additional information, contact your local representative.

Pressure Pots

Stainless steel pressure pots recommended. Non-stainless may be used with plastic liners if dip tube and fittings are changed to plastic or stainless steel.

Pumping Equipment

1.5 inch inner diameter (minimum) plastic diaphragm pump with PTFE checks and diaphragms. All pumps should be short stroked for pump longevity. For additional information, contact your local representative.

Filter (output)

Typically, 30# mesh is suitable: for example, Graco® model 12 (stainless steel) with filter bag #521-264 or equivalent.

Hoses

All fluid hoses should be nylon or polyester lined. Hose fittings should be stainless steel or plastic. The typical fluid hose length @ 1/4 inch i.d. should be 15 to 25 ft. Use of larger fluid hose i.d. or lengths less than 15 ft. will result in loss of fluid pressure control. Use of smaller fluid hose i.d. or lengths greater than 25 ft. can result in product coagulation in the line.

Note: New fluid lines are recommended due to potential incompatibility with other adhesives. Use only plastic and stainless steel fittings in contact with adhesive. Adhesive is incompatible with steel, galvanized steel, and cast aluminum parts.

Industry Specifications

[EN 45545 test report for details \(ISO 9239-1\)](#)

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Storage and Shelf Life

Best storage temperature is 60-80°F (15-27°C). Higher temperatures reduce normal storage life. Lower temperatures cause increased viscosity of a temporary nature. This water-dispersed adhesive will become unusable with prolonged storage below 40°F (4°C). Rotate stock on a “first in, first out” basis. Protect from freezing. When stored at the recommended temperature in the original, unopened container, this product has a shelf life of 18 months from date of manufacture.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.

Automotive Disclaimer

Select Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

Information

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ISO Statement

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