

March, 2015

3M™ Nitrile Rubber & Plastic Adhesive 826

Product Features

- A light colored, fast drying adhesive.
- Excellent resistance to aromatic fuels, water and oil.
- Used to bond many types of plastic films including ABS, cellulose acetate, and PVC.



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 Physical Properties

Property	Values		Notes	Test Condition
Color	Light Amber			
Solids Content by Weight	21 to 25 %			
Flash Point	2 °C	35 °F	Setaflash® closed cup tester	
Solvent	Ethyl Acetate, Ethyl Alcohol			
Viscosity	750 to 1250 cP		Brookfield Viscometer RVF #2 spindle @ 20 rpm	80°F(27°C)

Typical Uncured Physical Properties

Property	Values
Base	Nitrile
Net Weight	7.5 to 8 lb/gal

Typical Performance Characteristics

180° Peel Adhesion	Dwell/Cure Time	Test Condition
160 oz/in	1 day @ Room Temperature	Room Temperature
272 oz/in	3 days @ Room Temperature	Room Temperature
296 oz/in	5 days @ Room Temperature	Room Temperature
336 oz/in	7 days @ Room Temperature	Room Temperature
368 oz/in	2 wk @ Room Temperature	Room Temperature
432 oz/in	3 wk @ Room Temperature	Room Temperature
280 oz/in	After 3 wk @ Room Temperature	-30°F(-34°C)
80 oz/in	After 3 wk @ Room Temperature	150°F(66°C)
64 oz/in	After 3 wk @ Room Temperature	180°F(82°C)

Property: 180° Peel Adhesion Substrate: Canvas to Steel

Typical Performance Characteristics (continued)

Overlap Shear Strength	Test Condition
1395 lb/in²	-67°F(-55°C)
1811 lb/in²	-30°F(-34°C)
198 lb/in²	Room Temperature
88 lb/in²	150°F(66°C)
59 lb/in²	180°F(82°C)
55 lb/in²	200°F(93°C)
25 lb/in²	250°F(121°C)

Property: Overlap Shear Strength

Dwell/Cure Time: heat cured for 15 min. @ 325°F(163°C), 150 psi

Substrate: Aluminum to Aluminum

T-Peel Adhesion	Dwell/Cure Time
256 oz/in	Aged 2 days @ 120°F(49°C) plus 24 hr./120°F(49°C) VMP
144 oz/in	Aged 2 days @ 120°F(49°C) plus 24 hr./120°F(49°C) Jet Fuel
336 oz/in	Aged 2 days @ 120°F(49°C) plus 24 hr./160°F(71°C) Oil
208 oz/in	Aged 2 days @ 120°F(49°C) plus 1 wk./Freon #11
192 oz/in	Aged 2 days @ 120°F(49°C) plus 2 wk./Freon #11
240 oz/in	Aged 2 days @ 120°F(49°C) plus 1 wk./Freon #12
240 oz/in	Aged 2 days @ 120°F(49°C) plus 2 wk./Freon #12

Property: T-Peel Adhesion Method: ASTM D1876 Substrate: Canvas to Canvas

Handling/Application Information

Application Equipment

Appropriate application equipment enhances 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.

1. Pumping: A 2:1 ratio, divorced design pump is suggested. All material hoses should be nylon lined. Packings and glands in contact with the adhesive should be PTFE.

2. Spray:

Spray Gun	Air Cap	Fluid Tip	Air Pressure	Approximate Air Requirement ¹	Fluid Flow ²
DeVilbiss, JGA	704	E	60 psi	141/2 CFM	4 fl. oz./min.
Binks No. 62, 95 or 2001	66PE	66	60 psi	161/2 CFM	4 fl. oz./min.

Note: This adhesive is not recommended for airless spraying.

12-3 H.P. Compressor for intermittent use. 4 H.P. Compressor for continuous use.

2To Measure Fluid Flow: Pressurize fluid source only; pull trigger, flow material into measuring device for 60 seconds, increase or decrease fluid source pressure to obtain desired fluid flow.

3. Brush: Typical brushes designed for oil based paint may be used.

Handling/Application Information (continued)

Directions for Use

- 1. Surface Preparation: Surfaces must be clean, dry and dust free. Wiping thoroughly with methyl ethyl ketone (MEK)* will aid in removing oil and dirt.*
- 2. Application Temperature: For best results, the temperature of the adhesive and surfaces should be at least 65°F (18°C).
- 3. Application: Stir well before using.

Porous Surface(s): Brush, flow or spray a thin, even coat of adhesive to one or both surfaces. Coating both surfaces is preferred since it gives greater strength and permits longer open time before bonding. Very absorbent materials may require more than one coat. Bond while adhesive is still wet or aggressively tacky. Join surfaces with firm pressure.

Non-Porous Surface(s): Brush, flow or spray a thin, even coat of adhesive to both surfaces. Allow adhesive to dry until tacky. Join surfaces with firm pressure.

- 4. Drying Time: Drying time depends on temperature, humidity, air movement, and porosity of the materials bonded. Typically, drying times of 5 to 10 minutes can be expected.
- 5. Cleanup: Excess adhesive may be removed with methyl ethyl ketone (MEK)* or acetone,* preferably while still wet.
- *Note: When using solvents, extinguish all ignition sources and follow the manufacturer's precautions and directions for use.

Storage and Shelf Life

Store product at 60-80°F (15-26°C) for maximum storage life. Higher temperatures reduce normal storage life. Lower temperatures cause increased viscosity of a temporary nature. Rotate stock on a "first-in first-out" basis.

When stored in the original unopened container, this product has a shelf life of 24 months from date of manufacture.

Information

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References

Safety Data Sheet (SDS)

https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=826

ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

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.

