# 3M Scotch-Weld<sup>™</sup> Nitrile Rubber & Plastic Adhesive 826

Technical Data September, 2010

#### **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.

## Typical Physical Properties

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

Viscosity (approx.):	750 - 1250 cps.			
Brookfield Viscometer:	RVF #2 sp @ 20 rpm @ 80°F (27°C)			
Solids (by wt.):	21 - 25%			
Base:	Nitrile			
Color:	Light Amber			
Net Weight (approx.):	7.5 - 8.0 lbs./gal.			
Flash Point:	35°F (2°C) (Setaflash)			
Solvent:	Ethyl Acetate, Ethyl Alcohol			

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## Handling/Application Information

#### **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.

## **Application Equipment Suggestions**

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 <sup>1</sup>	Fluid Flow <sup>2</sup>
DeVilbiss, JGA	704	Е	60 psi	14 <sup>1</sup> / <sub>2</sub> CFM	4 fl. oz./min.
Binks No. 62, 95 or 2001	66PE	66	60 psi	16 <sup>1</sup> / <sub>2</sub> CFM	4 fl. oz./min.

Note: This adhesive is not recommended for airless spraying.

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

<sup>&</sup>lt;sup>1</sup>2-3 H.P. Compressor for intermittent use.

<sup>4</sup> H.P. Compressor for continuous use.

<sup>&</sup>lt;sup>2</sup>To 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.

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Typical Adhesive Performance Characteristics Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

180° Peel Strength Canvas/Steel		Overlap Shear Strength Alum./Alum.*		T-Peel Strength Canvas/Canvas aged 2 days @ 120°F (49°C) plus:		
Time @75°F (24°C)	Test Temp	Value (lbs./in. width)	Test Temp	Value (lbs./sq. in.)	Aging	Value (piw)
1 day	75°F (24°C)	10	-67°F (-55°C)	1395	1) 24 hrs./120°F (49°C) VMP	16
3 days	75°F (24°C)	17	-30°F (-34°C)	1811	2) 24 hrs./120°F (49°C) Jet Fuel	9
5 days	75°F (24°C)	18.5	75°F (24°C)	198	3) 24 hrs./160°F (71°C) Oil	21
7 days	75°F (24°C)	21	150°F (66°C)	88	4) 1 wk./Freon #11	13
2 weeks	75°F (24°C)	23	180°F (82°C)	59	2 wk./Freon #11	12
3 weeks	75°F (24°C)	27	200°F (93°C)	55	5) 1 wk./Freon #12	15
After 3 weeks	-30°F (-34°C)	17.5	250°F (121°C)	25	2 wk./Freon #12	15
After 3 weeks	150°F (66°C)	5	*Test specimens heat cured for			
After 3 weeks	180°F (82°C)	4	15 min. @ 325°F (			

Storage

Store product at  $60-80^{\circ}F$  (15- $26^{\circ}C$ ) 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.

**Shelf Life** 

When stored in the original unopened container, this product has a shelf life of 15 months.

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## **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.

#### **Technical Information**

The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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ISO 9001: 2000

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