



Scotch-Weld™ Liquid Adhesive 847

Product Data Sheet

Date: September 2022
Supersedes: June 2014

Product Description

Scotch-Weld™ Liquid Adhesive 847 adhesive is a high strength, fast setting nitrile based adhesive.

Key Features

- Used in the electronic, radio and TV industries.
- Provides strong flexible bonds
- Bonds leather, nitrile rubber, most plastics & gasketing materials to a variety of substrates
- Very good resistance to many fuels and oils.
- May be heat cured to obtain improved physical properties.

Typical Physical Properties

Viscosity (Brookfield RVF (#3 spindle @ 20 rpm) (ISO 2555)	2275 mPAs
Solids Content (EN ISO 827)	36 %
Base	Nitrile Rubber
Colour (wet & dry)	Dark Brown
Specific Gravity (EN ISO 2811.1)	0.88 g/cm
Solvent	Acetone

Typical Performance Characteristics

180 Peel Strength Canvas / Aluminium ISO 8510-2 (Speed of pulling: 50 mm/min)		
Time @ 23 °C	Test Temp	Value (daN/cm)
1 hour	23 °C ± 2 °C	3.4
96 hours	23 °C ± 2 °C	11.2

Oil Resistance (ISO 8510-2) Canvas/ aluminium peel samples cured for 72 hours at 23 °C, 24 h in oil at 70 °C		
Time @ 70 °C	Test Temp	Value (daN/cm)
24 hours in oil	70 °C	4.0

Typical Performance Characteristics

Heat Resistance

(ISO 8510-2)

(Canvas/aluminium peel samples cured for 18 hours at 23 °C and 24 h at 70 °C, a weight of 1 kg is applied on the canvas so as the angle between canvas and aluminium if of 90 °C, assembly is heated to 70 °C for 24 h, after this time, the distance of failure is measured)

Time @ 70°C	Test Temp	Value (daN/cm)
24 hours	70°C	5.0

Handling/Application Information

Directions for Use:

1. Surface Preparation: Remove all dust, dirt, oil, grease, wax, loose paint, etc.

Wiping with a solvent such as methyl ethyl ketone (MEK)* or 3M™ Citrus Base Cleaner will aid in preparing the surface for bonding

2. Application Temperature: For best results the temperature of the adhesive and surfaces to be bonded should be at least 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 Surfaces: 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. Greater immediate strength may be obtained by heat or solvent reactivation. See Reactivation below.

5. Reactivation: To solvent reactivate, coat both surfaces with adhesive. Allow to dry tack-free. Lightly wipe one surface with a solvent such as methyl ethyl ketone (MEK)* Complete bond within 30 s.

To heat activate, coat both surfaces with adhesive. Allow adhesive to dry completely. Reactivate by heating one or both surfaces to a minimum of 82 °C. Assemble immediately (while hot), using firm pressure to ensure contact.

6. Curing: 3M™ Scotch-Weld™ Liquid Adhesive 847 may be heat cured to obtain improved physical properties. Cure assembled parts at time and temperature listed pressure on the bond line.

7. Clean-up: Excess adhesive may be removed with a solvent such as methyl ethyl ketone (MEK) or acetone, preferably while adhesive is still wet*

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

Storage & Shelf Life

Store at 16 °C - 25 °C and 40 - 65 % relative humidity in its original box.
Higher temperatures reduce normal storage life. Lower temperatures cause increased viscosity of a temporary nature.
Rotate stock on a "first in-first out" basis.

The product can be stored up to 43 months after production.

Note: The shelf life may be shortened if the original packaging is not properly sealed or stored in an environment with high temperatures or humidity.

Precautionary Information

Refer to product label and Material Safety Data Sheet for health and safety information before using the product.
For information please contact your local 3M Office.
www.3M.com

For Additional Information

To request additional product information or to arrange for sales assistance, go to www.3M.be/bonding or www.3M.nl/bonding

Automotive Disclaimer

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