

3M

Scotch-Weld™

Industrial Adhesive

4799

Technical Data

December, 2007

Product Description

3M™ Scotch-Weld™ Industrial Adhesive 4799 can be used to bond most EPDM rubber, sponge rubber, rubber sheeting, felt, canvas, linoleum and other lightweight materials to many metals, woods, concrete and plastics.

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.) Brookfield Viscometer	7,500-18,000 cps. RVF #6 sp. @ 20 rpm
Solids (by wt.)	28-35%
Base	SBR
Color	Black
Net Weight (approx.)	6.6 - 7.0 lbs./gal.
Flash Point (closed cup)	-14°F (-26°C)
Solvent	Petroleum Distillate, n-hexane and toluene

Features

- Quick drying adhesive with fast strength buildup.
- Provides low soak-in on most porous substrate.
- Dries to a flexible, water resistant bond.

3M™ Scotch-Weld™

Industrial Adhesive

4799

Handling/Application Information

Directions for Use

- 1. Surface Preparation:** Surfaces to be bonded must be clean, dry and dust free. Wiping with a solvent such as methyl ethyl ketone (MEK)* will aid in removing oil and dirt.
 - 2. Application Temperature:** For best results the temperature of the adhesive and the surfaces being bonded must be at least 65°F (18°C).
 - 3. Application:** Stir or agitate well before using.
 - Porous Surface(s):** Brush a uniform, generous coat of adhesive on the least porous surface to be bonded. Assemble the materials immediately with sufficient pressure to ensure contact.
 - Non-Porous Surface(s):** Apply a uniform coat of adhesive to each surface. Allow adhesive to dry until it is tacky, but does not transfer. Assemble materials with sufficient pressure to ensure contact.
 - 4. Cleanup:** Excess adhesive may be removed with a solvent such as methyl ethyl ketone (MEK)*.
- *Note:** When using solvents, extinguish all sources of ignition in the area and follow the manufacturer's precautions and directions for use when handling such materials.

Application Equipment Suggestions

Note: Appropriate application equipment can enhance adhesive performance. The user is responsible for evaluating application equipment in light of the user's particular purpose and method of application.

- 1. Pumping:** Use a 5:1 ratio double acting, ball check pump with a 3 inch diameter air motor. All packings and glands in contact with the adhesive should be Teflon® coated.
- 2. Hoses:** Material hoses should be nylon lined with a working pressure of 500 psi or greater.
- 3. Brushes:** Brushes designed for use with oil based paint may be used.

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		
Time @ 75°F (24°C)	Test Temp.	Value (lbs./in. width)
1 day	75°F (24°C)	15.5
3 days	75°F (24°C)	22
5 days	75°F (24°C)	25
7 days	75°F (24°C)	25.5
2 wk.	75°F (24°C)	27.5
3 wk.	75°F (24°C)	28
after 3 wk.	-30°F (-34°C)	14
after 3 wk.	150°F (66°C)	8.5
after 3 wk.	180°F (82°C)	5

3M™ Scotch-Weld™ Industrial Adhesive 4799

Storage	Store product at 60-80°F (16-27°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 at the recommended conditions and kept in the original, unopened container, this product has a shelf life of one year from date of shipment.
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.
Product Use	All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.
Warranty and Limited Remedy	Unless stated otherwise in 3M's product literature, packaging inserts or product packaging for individual products, 3M warrants that each 3M product meets the applicable specifications at the time 3M ships the product. Individual products may have additional or different warranties as stated on product literature, package inserts or product packages. 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If the 3M product is defective within the warranty period, your exclusive remedy and 3M's and seller's sole obligation will be, at 3M's option, to replace the product or refund the purchase price.
Limitation of Liability	Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

ISO 9001:2000

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 standards.



Industrial Adhesives and Tapes Division

3M Center, Building 21-1W-10, 900 Bush Avenue
St. Paul, MN 55144-1000
800-362-3550 • 877-369-2923 (fax)
www.3M.com/industrial



Recycled Paper
40% pre-consumer
10% post-consumer

3M and Scotch-Weld are trademarks of 3M Company.

Teflon is a registered trademark of E.I. DuPont de Nemours Co.

Printed in U.S.A.

©3M 2007 78-6900-2823-4 (12/07)