

**GENERAL DESCRIPTION:**

WELD-ON® 811™ is a white, low VOC emission, thick syrupy, two-component, high strength reactive adhesive. It is conveniently packaged in a dual cylinder cartridge (10:1 ratio) and can readily be applied onto bonding surfaces by attaching the cartridge to the dispensing gun and mixing tip. WELD-ON 811 A&B has the same physical properties and capabilities as WELD-ON® 810™: fast cure time, withstand very high pressure and high impact resistant.

**APPLICATION:**

WELD-ON 811 is specially formulated for bonding large diameter PVC and CPVC pipe and fittings. It also bonds ABS, Styrene, Acrylic, FRP (fiberglass-reinforced polyester), concrete, clay and other materials to themselves or to dissimilar materials. It is great for repairing cracks or leaky pipe valves and fittings. WELD-ON 811 has excellent gap-filling property and is ideal for fabricating fittings and joining saddles to pipe. It also provides excellent adhesion in peel, tensile or sheer applications. For joints subjected to chemical exposure, prior evaluation must be made of the specific chemical concentration, temperature and pressure involved and the compatibility with WELD-ON 811. **Not recommended for use on Neoprene, Delrin, PTFE, Silicone, Polypropylene, Polyethylene and other Polyolefins or joints with an interference fit.**

**AVAILABILITY:**

This product is available in 470 ml dual cylinder cartridge. See our current Price List for detailed information on cartridge, dispensing gun, and mixing tips.

**STANDARDS AND CERTIFICATION LISTINGS:**

- Meets SCAQMD Rule 1168
- Compliant with LEED® (Leadership in Energy and Environmental Design). When using this Weld-On low VOC product, credit can be claimed for LEED Green Building Rating System - Indoor Environmental Quality.

**SPECIFICATIONS:**

COLOR:	White
RESIN:	Acrylic
SPECIFIC GRAVITY:	1.03 ± 0.04
BROOKFIELD VISCOSITY:	Minimum 40,000 cps @ 73° ± 3.6°F
APPROXIMATE COVERAGE:	15 sq. ft. per cartridge*

\*Based on laboratory evaluation @ 20 mil thickness. This data is for reference only. Actual coverage may vary.

**DIRECTIONS FOR USE:****SUBSTRATES PREPARATION**

Bonding surfaces must be clean and dry. If the surfaces are hard and glossy, abrading (sanding) and priming with a degreasing solvent is recommended. Chlorinated solvents, methyl ethyl ketone, acetone and/or rubbing isopropyl alcohol may be used to remove grease and/or dirt.

**CARTRIDGE ASSEMBLY**

1. Remove plugs from both sides of cartridge (i.e. nozzle and bottom piston) by removing the retaining nut.
2. Place cartridge into the dispensing gun channel. Press trigger until both plungers are snug against the bottom pistons. Continue to press trigger allowing both resin and catalyst to reach tip of cartridge nozzle. Ensure both components are flowing freely from the cartridge nozzle. Wipe off excess resin and catalyst.
3. Attach mixing tip to cartridge and tighten the retaining nut. **DO NOT OVER TIGHTEN.** The mixing tip can be inserted by lining up the notch on the cartridge with the cutout on the mixing tip.

**Note:** To preserve unused adhesive in the cartridge, leave the mixing tip in place as it temporarily reseals the cartridge. The cartridge with the mixing tip can be removed from the dispensing gun. When you are ready to use the adhesive again:

- Remove the old mixing tip and thoroughly clean the threaded areas at the cartridge nozzle concurrently ensuring there is NO crossover of the two components. Remove any blockages that may have formed in the nozzle. **DO NOT FORCE BLOCKAGES BACK INTO THE CARTRIDGE.**
- Repeat cartridge assembly steps 2 and 3. Ensure there is no residual catalyzed material in the cartridge nozzle area.
- Always use a new mixing tip when the cartridge is not in use for prolonged duration. **DISCARD THE FIRST 6-12 INCHES OF ADHESIVE AFTER THE NEW MIXING TIP IS INSERTED.**

**INSTALLATION**

1. Assemble materials for the job: WELD-ON 811 cartridge, dispensing gun, mixing tips, sandpaper, clean wiping cloth, cleaning solvent, safety glasses and gloves.
2. Prepare joints by sanding to roughen mating surfaces. Wipe surfaces clean with a dry rag or solvent cleaner. Do not soften surfaces with solvent cleaner.
3. Apply ample amount of WELD-ON 811 adhesive to the bonding surfaces. Assemble parts and allow squeeze out to remain as filler.



4. Allow the joined surfaces to cure undisturbed. Recommended set time is 1 hour. Recommended cure time is 2 hours to reach 80% bond strength (resin layer cures to a hard gel), 24 hours to reach near ultimate strength. The cured layer is a tough, chemical and water resistant plastic.

**Note:** Warmer weather will shorten pot life and cure time. Colder weather will increase the time for both. Applying heat may speed up the cure time. When joining CPVC for service temperatures over 150°F (65°C), please contact WELD-ON for more information.

#### **REPAIR**

Replacing a failed joint with new material and taking greater care in the joining process is always preferred. This repair is for leaks only and ideal for area where the joint cannot be cut out. Do not use this method if the pipe has separated from the fitting.

1. Assemble materials for the job: WELD-ON 811 cartridge, dispensing gun, mixing tips, fiberglass cloth mat cut to desirable size for wrapping the leaked pipe, sandpaper or emery, clean wiping cloth, and gloves.
2. Turn off water pressure. Dry off the bonding area and abrade it well with sandpaper and wipe clean.
3. Apply a generous coat of adhesive to the leakage and surrounding area.
4. Apply the adhesive to the mating surface of fiberglass cloth. Wrap cloth around the leaked pipe. Some adhesive should squeeze up through cloth. Note: Fiberglass cloth is recommended for added structural strength to the leaked pipe. Good bonding result is also achievable without using the cloth.
5. Apply an additional coat of WELD-ON 811 adhesive to the top surface.
6. Allow to cure for a minimum of 4 hours at 70°F (21°C). Overnight or 24 hours cure is desirable before re-pressurizing the systems.

#### **SHELF LIFE:**

1 to 1.5 year in unopened cartridge when stored between 50°F (10°C) and 80°F (27°C). Keep away from sources of heat, sunlight and moisture.

#### **QUALITY ASSURANCE:**

WELD-ON 811 is carefully evaluated to assure that consistent high quality is maintained. Fourier transform infrared spectroscopy, gas chromatography, and additional in depth testing ensures each batch is manufactured to exacting standards. A batch identification code is stamped on each can and assures traceability of all materials and processes used in manufacturing this product.

#### **IMPORTANT NOTE:**

This product is intended for use by skilled individuals at their own risk. These suggestions and data are based on information we believe to be reliable. Installers should verify for themselves that they can make satisfactory joints under varying conditions. Toward this end, it is highly desirable that they receive personal instruction from trained instructors or competent, experienced installers. Contact Weld-On or your supplier for additional information or instructions.

**Refer to the current WELD-ON 811™ GHS Safety Data Sheet for additional safety precautions, first-aid, handling, storage and transportation information.**

#### **WARRANTY:**

Weld-On Adhesives, Inc., warrants to all original purchasers of Weld-On products that all new Weld-On products shall be of good quality and free from defects in material and workmanship for the product's shelf life. If any Weld-On product becomes defective, or fails to conform to this written limited warranty under normal use and storage conditions, and if the original purchaser complies with the terms of this limited warranty, then Weld-On will, without charge, replace the nonconforming product.

This limited warranty shall extend to all products manufactured and sold by Weld-On. However, this limited warranty shall not extend to, nor shall Weld-On be responsible for, damages or loss resulting from accident, misuse, negligent use, improper application, or incorporation of Weld-On products into other products. In addition, any repackaging of Weld-On products also shall void the limited warranty provided herein.

Any defective Weld-On products shall be replaced pursuant to the terms of this limited warranty by returning the defective product, with transportation charges prepaid, to Weld-On at the following address:

Weld-On Adhesives, Inc.  
Attn: Customer Service  
455 West Victoria Street  
Compton, CA 90220

Any implied warranty in connection with any Weld-On product hereby is limited in duration to the period of this limited warranty. Weld-On shall not be responsible for, nor does this limited warranty extend to, consequential damage, or incidental damage or expense, including without limitation, injury to persons or property or loss of use. This limited warranty is in lieu of all other express warranties of Weld-On, and Weld-On does not assume, nor does it authorize any person to assume on its behalf, any other obligation or liability.