



# Scotch-Weld™ Water Based

## Adhesive 30

### Product Data Sheet

Date: June 2017  
Supersedes: April 2016

#### Product Description

Scotch-Weld™ 30 is a water-dispersed, sprayable contact adhesive for high immediate bond strength and long bonding range.

#### Key Features

- Non-flammable in the wet state.
- Post-formable and heat resistant.
- Bonds most foamed plastics, plastic laminate, wood, plywood, and canvas to themselves and to each other.

#### Note:

Not recommended for drywall laminating or for bonding metal surfaces (unless force dried and protected from moisture).

#### Special Note

When bonding wood veneers, success is dependent on many variables such as environmental conditions, bonding process, type of base material, type of veneer, adhesive type and top coat finishing systems to name a few. For unbacked wood veneers, water based contact adhesives are not recommended. It is the user's responsibility to thoroughly test any adhesive for its suitability in bonding wood veneers. It is also recommended to follow the veneer manufacturers recommendation and industry guidelines.

#### Typical Physical Properties

Base	Polychloroprene
Colour	Wet: Turquoise Dry: Green
Consistency	Thin Liquid
Viscosity (Brookfield RVF spindle 1 at 20 rpm at 26°C.)	150 mPa.s
Solid Content (EN 3251 /EN ISO 827)	50%
Specific Gravity (ASTM D 1475-98)	1.08
pH	10 – 11
Flash Point	None

**Physical Properties**

Adhesion Tissue/tissue	Acc .to. ASTM D 1876 (3 samples only)	122	N/25 mm
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**Application Equipment  
Suggestion**

Spray Gun	Air Cap Bars	Fluid Tip	Air Pressure recommended ml/minute	Fluid Flow l/min
Kremlin SKM 18	N3 or G2	15	1.0	.3
Binks No. 18. 29. 62. 61	66SF	65	0.6 - 1.3	.3
DeVilbiss JGA JGS or AGB	30	FF	0.6 - 1.3	.3

**Note:** Appropriate application equipment can enhance 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

**Handling/Application  
Information**

**Directions for Use**

**1. Surface Preparation:** Surfaces must be clean, dry and dust free. Wiping with a solvent such as 3M™ Scotch-Grip™ Solvent No. 3\* will aid in removing oil and dirt. Temperature of adhesive and surfaces during fabrication should be at least 18°C. If used for decorative plastic laminates, the laminate should have reached moisture equilibrium for the shop conditions.

**2. Application:** Apply a uniform, generous coat of adhesive to both surfaces with a nylon brush, roller (texturing type), or spray. One coat is usually sufficient on most surfaces. Dull spots when dry indicate insufficient adhesive. Very porous material may require more than one coat. (Allow adhesive to dry completely between coats.) An uniform, glossy film indicates sufficient adhesive.

**3. Coverage:** Coverage is dependent upon porosity of the substrate and the method by which the adhesive is applied. Use 3.0-3.5 gms/ft<sup>2</sup> of dry adhesive per surface for wood, particle board and high pressure laminates with the adhesive applied by spray or roller. More adhesive (lower coverage) is recommended if very soft wood, fabrics, foams, etc. are to be bonded, or if the adhesive is applied by brushing.

**4. Drying Time:** The adhesive dries sufficiently in 30 minutes under normal temperatures and humidities to make bonds. High humidity will slow the drying; high temperature will speed the drying. After the adhesive is dry the bond must be completed within four hours.

**5. Assembly:** Spacers, such as dowels or strips of laminate, may be used to help prevent premature adhesive-to-adhesive contact and bonding prior to positioning. Slide out the spacers and apply uniform pressure (3kg/cm<sup>2</sup> minimum), working toward the edges. A manual roller (75mm width maximum), can be used with high body pressure, to ensure adequate contact and bonding, especially on edges.

Bonded assemblies may be machined, trimmed, etc. immediately after bonding. The use of a pinch or nip roll is preferred for optimum performance.

**6. Clean-up:** If adhesive has not dried, clean equipment with water containing a small amount of detergent\*\* Adhesive cannot be cleaned off rollers or brushes after it has dried.

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

\*\*Cleaning solution: One pint of cleaner to five gallons of water. Flush with clean water.

### **Application Tips for Using 3M™ Scotch-Weld™ Adhesive 30**

**(1) Working Temperature:** The adhesive and both surfaces to be bonded should be 18°C or above at the time of bonding. After storage at low temperature and before using, the adhesive must be warmed to room temperature. Do not place in oven or on stove; bring to temperature by placing in a warm room. If this is not done, the open time and other working properties of the adhesive may be adversely affected.

**(2) Use Enough Adhesive:** It is important to remember that it is difficult to use too much adhesive, but you can have problems if you don't use enough. 3M™ Scotch-Weld™ Adhesive 30 must be applied to both surfaces. Adhesive can be applied by spray (see Application Equipment Suggestions), brush or a texturing type roller.

Non-porous surfaces should require only one coat, while porous surfaces may require two coats. Wherever you use more than one coat, be sure to let the adhesive dry completely between coats. Hardwoods, tempered hardboard and decorative laminates are non-porous. Soft woods, untampered hardboard, plywood and plaster are typical porous surfaces which may require two coats.

**Note:** 3M water-dispersed contact adhesives should never be thinned.

**(3) Let Adhesive Dry Completely:** Under normal temperature and humidity conditions, 3M™ Scotch-Weld™ Adhesive 30 will dry in approximately 30 minutes. In very warm, low humidity conditions, drying may take as little as 10-15 minutes. Lower temperatures and higher humidity mean slower drying. When the adhesive coating completely loses its milky appearance and becomes clear it is ready to bond. You have four (4) hours after the adhesive is dry in which to complete the bonding job. You can bond as soon as it is dry, but the longer you wait the stronger the initial bond will be.

To speed drying, infrared heat lamps may be used. When force drying is used, assembly and bonding must be completed while one or both of the bonding surfaces is warm. If both surfaces are cold, reheat either or both before bonding.

If your two surfaces do not grab onto each other immediately when brought into contact, the adhesive has dried too long or not enough adhesive was applied. In either case, another coat of adhesive over each surface will remedy the problem.

**(4) Apply Pressure Thoroughly:** Bonding is immediate upon contact. Sustained pressure is not required, but good uniform pressure must be applied to the whole surface. Apply pressure by using heavy body pressure on a small (75mm width maximum) hand “J”-roller. The use of a pinch roll is preferred for optimum performance.

**Note:** Rolling pins and other wide rollers are unsatisfactory because they bridge low spots and because they distribute the pressure over too large an area.

**(5) Assembling:** Position the surfaces carefully before assembly. No adjustment is possible after the adhesive films make contact. Use the paper slip sheet method or spacers to position large pieces.

**(6) Finishing:** Bonded assemblies can be machined, trimmed and finished immediately after bonding.

**(7) Cleaning:** Brushes or rollers which are to be reused should be wrapped with plastic wrap to keep adhesive wet as complete cleaning is difficult.

**Note:** Never pour solvent onto a bonded surface; it will attack the adhesive line and weaken the bond. Just wipe with cloth dampened in solvent or cleaner such as 3M™ Citrus Base Cleaner\* Turpentine will not dissolve the adhesive.

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

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**Storage & Shelf Life**

Store product at 15 °C – 25 °C for maximum storage life. Higher temperatures reduce normal storage life. Lower temperatures cause increased viscosity of a temporary nature  
Water dispersed products will become unusable with prolonged storage below 4 °C.  
Rotate stock on a “first in, first out” basis

The product can be stored 28 months after production in the original, unopened container

**Note:** PROTECT FROM FREEZING

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**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](http://www.3M.com)

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**For Additional Information**

To request additional product information or to arrange for sales assistance, call.....  
Address correspondence to: 3M

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