Product Datasheet

SP&S Specialty Polymers and Services

LIQUIDWELD™ C194

SPRAYABLE CALIFORNIA COMPLIANT CONTACT ADHESIVE

LIQUIDWELD C194 is a multipurpose, sprayable contact adhesive that bonds most materials. When cured the C194 provides strong bonds that are post-formable, peel resistant and retain good bond strength up to 200°F (93.3°C). The adhesive provides strong bonds to metal, wood, decorative laminates, many types of foam, and some types of rubber. Cured bonds are resistant to moisture and humidity.

Custom color and viscosities are available on request. Please contact us to discuss your application if you think a modified version would be helpful for your application.

APPLICATIONS & BENEFITS:

- Qualified for LEED®-NC & CI EQ Credit
- Conforms to SCAQMD Rule 1168 & Bay Area AQMD Regulation 8, rule 51
- VOC & HAPS Free
- Good open time (1 hour) and excellent bond Strength

HANDLING PROPERTIES	VALUE	TEST METHOD
Base Materials	Synthetic Rubber in Solvent	
Color	Clear amber*	
Odor:	Solvent	
Density	0.96 g/cm³	ASTM E-201
Weight per gallon	7.99 lbs/gallon	ASTM E-201
Viscosity @ 25ºC, Spindle 2 @ 20rpm	200 cps	ASTM D-2393
Percent Solids (non-volatile %)	35% - 38%	
Flash Point (SETA)	15.0°F / (-9.4°C)	
Typical coverage at 3 grams/Sq. Ft	50 - 60	
Drying time:	typically 2 - 10 minutes at room temperature	
Open Time:	up to 1 hour after application	
Curing time:	At room temperature full curing may take 3-7 days, but handling strength is typically achieved immediately after assembly and will approach 90% of final strength after 24 hours at room temperature.	

NOTE : Values are based on laboratory or average production results – not for specification purposes.

SUGGESTED PROCESSING GUIDELINES:

Apply by brush, roller, spraying, or roll coating. If spraying or for a lower application viscosity or longer open time, the adhesive may be thinned with methyl acetate or our Ultralane Thinner #25. However, the addition of additional solvent will reduce the solids content and will increase the dry time.

Stir the product or roll the container to achieve a uniform consistency prior to use and be sure that any surfaces to be coated or bonded are clean and dry. If possible, lightly abrade metal and rubber surfaces to be bonded and ensure they are free of any dust, debris, or loose material prior to applying the adhesive. Abrading the surface gives more surface area for bonding and more mechanical interlocking of the adhesive with the surface. .

There are 3 primary processing methods which should be considered:

- **Wet Bond Method** – this is the simplest method to use and is suitable whenever the materials being bonded are porous and will allow the solvent in the product to evaporate. The Wet Bond Method is achieved by simply applying the adhesive in thin layers to both surfaces to be bonded, allow the adhesive to dry for about 1-2 minutes or until a highly tacky surface develops, and then pressing together the surfaces using an even pressure of 25 – 50 psi. Hold the pressure for at least 1 hour and as long as 24 hours. Note: for rubber bonding – use only the minimal pressure necessary to prevent distortion of the rubber which can weaken the bond lines. The drying times reported on the previous pages will give some idea of the time for the adhesive to fully cure. Once the bond-line is cured, most general use can begin, but exposure to weather, chemicals, or high mechanical loads should wait until the full curing time as elapsed.

- **Dry Bonding Method** – this method involves applying a thin coating of the adhesive to all of the surfaces to be bonded, then allowing the adhesive to dry as per the drying times on the previous page. Once the adhesive layer is dry (i.e. it will no material transfers to a piece of kraft paper pressed against the adhesive surface), then the surfaces should be aligned and bonded within 1 hour. Protect the adhesive surface from dust and other contaminants prior to bonding. Once ready to bond, firmly press the surfaces together and apply 25 – 50 lbs. of even pressure. Once pressure has been applied to fuse the dry adhesive layers, the bonded parts can typically be routed, trimmed, cut, filed, and machined.

Application Notes:

- If the surfaces to be bonded are porous the best results may be achieved by applying the adhesive in 2 thin layers to each surface to prevent the adhesive from soaking into the pores and leaving too little adhesive at the bond-line. Allow the first adhesive layer to dry for at least 5-10 minutes before application of the final layer.
- Do not use on polystyrene foams it as it may dissolve or otherwise degrade the foam. Also do not use on plasticized vinyls as the plasticizer may prevent satisfactory bonding or leach into the bond-line and degrade it over time.

STORAGE GUIDELINES:

Store this material at 59°F– 95°F (15°C–35°C) in a clean, dry environment out of direct sunlight and away from heat, sparks, or flames. Tightly reseal containers after use to prevent evaporation. If the recommended storage conditions are observed the products will have a minimum shelf-life of 12 months from the date of shipment. If product is exposed to temperature below 59°F (15°C), especially to freezing temperatures, return the material to room temperature (around 77°F(25°C) and roll the container or gently mix with a stirrer until the material appears uniform. If the material has skinned, formed solid particles, or otherwise become visually non-uniform do not use the material.

HANDLING PRECAUTIONS:

Mandatory and recommended industrial hygiene procedures should be followed whenever these products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

PERSONAL HYGIENE:

LIQUIDWELD C194
DANGER - FLAMMABLE: AS WITH ALL INDUSTRIAL MATERIAL USE CAUTION AND PERSONAL PROTECTIVE EQUIPMENT WHEN WORKING WITH THIS MATERIAL.
May cause respiratory irritation. May cause mild skin irritation. Causes serious eye irritation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, or clothing. Wear eye protection and impervious gloves when handling. Extended exposure could cause irritation of the nasal passages, eyes, or skin. Wash thoroughly after handling. Use only with adequate ventilation. Do not take internally.

FIRST AID

In case of contact:
Skin – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.
Eyes – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.
Inhalation - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.
Ingestion - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

DISCLAIMER:

IMPORTANT: The following supercedes Buyer's documents. **SELLER / MANUFACTURER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE**. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller / Manufacturer be liable for incidental, consequential, or indirect damages for alleged negligence, breach of warranty, strict liability, tort, or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results presented are based on controlled or laboratory work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

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