

SAUEREISEN

ALUSEAL ADHESIVE CEMENT NO. 2 and No. 2 POWDER & LIQUID

Strong ceramic adhesive for:

Assembling **Insulating**
Sealing **Bonding**
Thermal Conductivity

Sauereisen Aluseal Adhesive Cement No. 2 is a ceramic cement paste offering good bond strength and thermal shock resistant properties for assembling, sealing and cementing porcelain, glass, metal and other materials. Its fine particle size and excellent flow characteristics make No. 2 a good candidate for those applications where an inorganic bond is required between component parts and only small clearances are available.

No. 2 exhibits good coating properties. Thin film sections have shown exceptional flexural and tensile strength for a ceramic adhesive. Sauereisen No. 2 is supplied as a ready-mixed paste and may be applied by brushing, dipping or spraying. No. 2 is suitable for use on production lines with mechanical dispensers or applicators because it will not harden in the equipment during normal operation.

Aluseal Adhesive No. 2 is also available in a separate powder and liquid and known as Sauereisen Aluseal Adhesive Cement No. 2 Powder & No. 2 Liquid. When mixed together at the proper ratio, No. 2 Powder & Liquid has the same characteristics as the No. 2 Paste

CHARACTERISTICS

- Heat conductive
- Thermal shock resistant
- Insulates electricity
- Good mechanical bond

PHYSICAL PROPERTIES

Coefficient of thermal expansion (ASTM C372)	
200-1000°F	7.6 x 10 ⁻⁶ /F°
(93-538°C)	14.87 x 10 ⁻⁶ /C°
Color	White
Compressive strength @ 7 days (ASTM C579)	3,600 psi (253 kg/cm ²)
Density (ASTM C20)	153 pcf (2.45 gm/cm ³)
Dielectric constant @ 70°F (21°C) (ASTM D150)	107.2
Dielectric strength @ 70°F (21°C) (ASTM D149)	48-55 volts/mil. (2000 volts/mm)
Dissipation factor @ 70°F (21°C)	0.55
Maximum service temperature	
Pyrometric cone equivalent (ASTM C-24)	3,000°F (1649°C)
Modulus of rupture (ASTM C580)	3400 psi (239 kg/cm ²)
Shrinkage	0.5-2.5%
Volume resistivity @ 70°F (21°C) (ASTM D1829)	10 ⁸ x 10 ¹⁰ ohm-cm

Physical properties were determined on specimens prepared under laboratory conditions using applicable ASTM procedures. Actual field conditions may vary and yield different results; therefore, data are subject to reasonable deviation.

INSTRUCTIONS

Mixing

No. 2 should be thoroughly remixed to a smooth, uniform consistency prior to use. In some cases, setting may occur during transport and storage.

Aluseal Adhesive Cement No. 2 Powder & liquid should be mixed at a ratio of 70% powder to 30% liquid by weight. or (2.5 :1)

Application

Surfaces to receive No. 2 should be clean and free of grease and dirt. Porous substrates should be dampened slightly with Sauereisen Thinning Liquid No. 14 prior to application.

No. 2 should be used in thin applications; apply several coats where a heavy layer is desired. In multiple coat applications, each coat must be thoroughly dry prior to applying additional coats. If necessary, Thinning Liquid No. 14 should be used where the No. 2 cement is required in a thinner consistency

Minimum amount of liquid should be used as excess liquid reduces mechanical strength, increases shrinkage and delays set time. No. 2 should not be applied at a thickness greater than 1/4 inch.

SETTING/CURING

No. 2 cures by air drying at room temperature. Drying time depends on the consistency and thickness of the application. Normally 18-24 hours drying at ambient temperature is sufficient. When the cement has minimal exposure to air, or if it is desired to accelerate the cure, low temperature oven drying at 180°F may be used. Avoid steaming while drying. If the cement will be exposed to elevated temperatures, contact Sauereisen for appropriate drying schedule recommendations.

If high humidity resistance is required and it is impractical to fire No. 2, a moisture-resistant lacquer, silicone coating, or Sauereisen Hi-Temp Primer No. 560 should be applied to the exposed surfaces.

PACKAGING

No. 2: Paste
1-quart cans, 1-gallon cans;
and 5-gallon pails.

No. 2 Powder & Liquid
Powder: 1-quart cans, & 1-gallon
cans
Liquid: 1-quart cans & 1 gallon
cans

CLEAN-UP

All equipment should be cleaned with soap and water before No. 2 cures. If removal is required after cure, a low concentration of sodium hydroxide may dissolve the cement. Consult Sauereisen for other recommendations.

SHELF LIFE

Sauereisen Aluseal Adhesive Cement No. 2 has a shelf life of six months when stored in unopened, tightly sealed containers in a dry location at 70°F. If there is doubt as to the quality of the material, consult Sauereisen.

Sauereisen Aluseal Cement No. 2 Powder & Liquid has a shelf life of 1 year when not mixed together and stored in unopened, tightly sealed containers in a dry location at 70°F. If there is doubt as to the quality of the material, consult Sauereisen.

CAUTION

Consult Material Safety Data Sheets and container label Caution Statements for any hazards in handling this material.

WARRANTY

We warrant that our goods will conform to the description contained in the order, and that we have good title to all goods sold. WE GIVE NO WARRANTY, WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE OR OTHERWISE, EXPRESS OR IMPLIED, OTHER THAN AS EXPRESSLY SET FORTH HEREIN. We are glad to offer suggestions or to refer you to customers using Sauereisen cements and compounds for a similar application. Users shall determine the suitability of the product for intended application before using, and users assume all risk and liability whatsoever in connection therewith regardless of any suggestions as to application or construction. In no event shall we be liable hereunder or otherwise for incidental or consequential damages. Our liability and your exclusive remedy hereunder or otherwise, in law or in equity, shall be expressly limited to our replacement of nonconforming goods at our factory or, at our sole option, to repayment of the purchase price of nonconforming goods.

- Information concerning government safety regulations available upon request.**

- Sauereisen also manufactures products for corrosion resistance, electrostatic discharge protection and machinery grouting.**

SAUEREISEN ...since 1899
160 Gamma Drive
Pittsburgh, PA 15238-2989 USA
Phone 412/963-0303 Fax 412/963-7620
www.sauereisen.com