

# SAUEREISEN

## ELECTRICAL CEMENT NO. DW-30

### A porcelain-like sealer for:

**Appliances**    **Heaters**  
**Elements**     **Insulating**  
**Embedding**    **Cutlery**

Sauereisen Electrical Cement No. DW-30 is an inorganic, chemically-setting, magnesium oxide base material which develops a slight expansion while hardening into a porcelain-like body. Since Sauereisen No. DW-30 is dimensionally stable from -100°F to +900°F and will not corrode resistance wires at elevated temperatures, it is recommended for embedding heating elements and potting resistors.

The stable nature of Electrical Cement No. DW-30 allows for application within explosion proof fittings. Other recommended uses are cementing knife blades into plastic, ceramic, wood or metal handles, weighting candlesticks or similar cavities, and sealing set screws. The product is supplied in Powder form and is easily mixed with water to apply.

### CHARACTERISTICS

- Insulates electricity.
- Fireproof refractory.
- Withstands temperatures to 900°F (482°C).
- Heat conductive and thermal shock resistant.
- Resists water and most solvents.
- Safe to use/non-toxic.
- Strong, porcelain-like body.
- Odorless.
- Cures by chemical set even in confined areas.
- Nonshrinking.

### PHYSICAL PROPERTIES

Coefficient of thermal expansion (ASTM C372)	4.7 x 10 <sup>-6</sup> /F° (8.46 x 10 <sup>-6</sup> /C°)
Color	Tan
Compressive strength (ASTM C579) @ 7 days	4,500 psi (316 kg/cm <sup>2</sup> )
Density (ASTM C20)	120 pcf (2 gm/cm <sup>3</sup> )
Maximum service temperature	900°F (482°C)
Mixing ratio (Powder:water, by weight)	5:1
Tensile strength (ASTM C307)	300 psi (21 kg/cm <sup>2</sup> )
Thermal conductivity	5.8
Volume Resistivity (ASTM D1829)	10 <sup>8</sup> -10 <sup>10</sup>

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.

### APPLICATION

Sauereisen No. DW-30 Powder should be thoroughly remixed before using. The recommended mix ratio is 5 parts No. DW-30 Powder and 1 part potable water. Place warm water into a clean mixing container and gradually add the No. DW-30 Powder while mixing. Continue mixing until a smooth, uniform consistency is obtained. Mixing may be done with a slow-speed mixer or by hand with a spatula.

No. DW-30 may be mixed to a thinner consistency by regulating the amount of water used; however, the use of excess water will reduce mechanical strength, increase shrinkage and delay set time. Failure of cement to adhere indicates setting has begun - discard cement. Do not attempt to retemper by adding more water. Porous substrates may require dampening with Sauereisen Thinning Liquid No. 14 before applying the mixed cement. The cement may be applied by pouring, casting or mechanical dispenser.

### SETTING/CURING

No. DW-30 hardens with an internal chemical-setting action in 18 to 24 hours at ambient temperature. Working time of No. DW-30 when Powder is mixed with water is approximately 30 minutes at 70°F. If it is desired to accelerate the cure, oven drying at 180°F can 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 cement, a moisture-resistant lacquer or silicone coating should be applied to the exposed surfaces.

### PACKAGING

Sauereisen Electrical Cement No. DW-30 is packaged in 1-quart and 1-gallon cans, in addition to 50-pound bags on stretch-wrapped pallets.

### CLEAN-UP

All equipment should be cleaned with soap and water before No. DW-30 cures. If removal is required after cure, consult Sauereisen for recommendations.

## SHELF LIFE

Sauereisen No. DW-30 Powder has a shelf life of one year 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.

## 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.

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

**SAUEREISEN** ...since 1899

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