

SAUEREISEN

ELECTRICAL REFRACTORY CEMENT NO. 75

Calcium Aluminate castable
cement for:

Thermal Shock
Potting
Assembling
Corrosion Resistance
Gunning
Sealing

Sauereisen Electrical Refractory Cement No. 75 is a castable, hydraulically-setting cement used as a bonding mortar or refractory coating for high-temperature assembling, encapsulating and potting applications. No. 75 may also be cast or gunite applied to protect concrete from thermal shock.

CHARACTERISTICS

- Heat conductive and thermal shock resistant.
- Insulates electricity at high and low temperatures.
- Withstands temperatures to 2600°F (1427°C).
- Resists impact and abrasion.
- Low shrinkage.
- Resists solvents, alkalis and mild acids.
- Easy to use/odorless.
- Adheres to metal, ceramics, brick and other surfaces.
- High strength.
- Good volume stability.
- Hardens by hydraulic set even in confined areas.
- More economical than organics.

PHYSICAL PROPERTIES

Autoclave expansion	0.04%
Compressive strength (ASTM C579)	3,500 psi (246 kg/cm ²)
Density (wet) (ASTM C20)	150 pcf (2.08 gm/cm ³)
Flexural strength (ASTM C580)	800 psi (56 kg/cm ²)
Maximum service temperature	2600°F (1427°C)
Mix ratio (Powder:Water by weight)	4:1
pH range	4.0 -12.0

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. 75 is supplied as a Powder and mixed with potable water as used. No. 75 Powder should be thoroughly remixed before using. Weigh out approximately 80% Powder and 20% water. Place measured amount of water into a clean mixing container and gradually add No. 75 Powder to water 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.

Minimum amount of water should be used as excess water reduces mechanical strength, increases shrinkage and delays 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 water before applying the mixed cement.

SETTING/CURING

Electrical Refractory Cement No. 75 takes an initial set in approximately one hour at 70°F and develops a strong hydraulic bond in 24 hours at room temperature. Proper curing of No. 75 is critical to developing maximum strengths. No. 75 should be moist cured in a high humidity controlled environment for at least 24 hours at room temperature in accordance with ACI 547 recommendations. If a humidity controlled environment is not available, cemented articles should be placed in covered trays during the curing period or have an appropriate curing compound in accordance with ASTM C-309 specification applied to them. After a 24 hour cure, controlled drying is required to ensure that all residual moisture is removed from the cement. Consult Sauereisen for an appropriate drying schedule recommendation.

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

1-quart and 1-gallon cans; 50-lb. moisture-resistant bags on plastic-wrapped pallets.

CLEAN-UP

All equipment should be cleaned with soap and water before No. 75 cures. If removal is required after cure, consult Sauereisen for recommendations.

SHELF LIFE

Sauereisen No. 75 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 a 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 produces compounds for corrosion resistance and grouting.

SAUEREISEN ...since 1899

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