

## Glassbond Sauereisen Sealing Cement No. 33S

### Characteristics

- Insulates electricity
- Withstands temperatures to 1600°F (827°C)
- Heat conductive and thermal shock resistant
- Resists oil, solvents and most acids (except hydrofluoric)
- Safe to use/non-toxic
- Adheres to metal, ceramics, glass and other surfaces
- Odourless
- Hardens by chemical set even in confined areas
- More economical than organics

### Recommended For

Appliances  
Casting  
Insulating  
Sealing  
Potting

### Description

Sealing Cement No. 33S is a chemical-setting, inorganic, silicate-base cement that is used for assembly/sealing applications common to electrical equipment. It is ideal for coating molds and forms used to produce special shapes and patterns. No. 33S is supplied in powder form and need only be mixed with water to apply.

### Physical Properties

Colour	White
Coefficient of thermal expansion	9.48 x 10 <sup>-6</sup> /°F (17.06 x 10 <sup>-6</sup> / °C)
Compressive strength @ 7 days	1,460 psi (102 kg/cm <sup>2</sup> )
Modulus of rupture @ 7 days	431 psi (30 kg/cm <sup>2</sup> )
Flexural strength @ 2 days	250 psi (17 kg/cm <sup>2</sup> )
Maximum service temperature	1600°F (827°C)
Mix ratio ( powder: water, by weight)	75 to 80: 25 to 20
Pot life @ 21°C	≥ 30 minutes

**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. Data should not be used for specification purposes.**

### Application/Instructions

**MIXING** - Sealing cement No. 33S Powder should be thoroughly remixed before using. Weigh out 75-80% of No. 33S Powder and 20-25% potable water. Place measured amount of water into a clean mixing container and gradually add the No. 33S 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. 33S 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.

**APPLICATION** - Porous substrates may require dampening with Glassbond Thinning Liquid No. 14 before applying the mixed cement. Failure of cement to adhere indicates setting has begun - discard cement. Do not attempt to retemper by adding more water.

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## **Setting/Curing**

Sealing cement No. 33S hardens with an internal chemical-setting action after 18-24 hours at ambient temperature. Pot life of the paste when powder is mixed with water is approximately 30 minutes at 21°C (70°F). If it is desired to accelerate the cure, low temperature oven drying at 82°C (180°F) can be used. Avoid steaming while drying. Proper curing of the cement is critical to developing maximum strengths. If the cement will be exposed to elevated temperatures, constant water immersion or steam environments, consult Glassbond for an appropriate drying schedule recommendation.

For higher humidity resistance where it is impractical to fire cement, a moisture-resistant lacquer or silicone coating should be applied to the exposed surfaces.

## **Cleaning**

All equipment should be cleaned with soap and water before No. 33S cures. If removal is required after cure consult Glassbond for recommendations.

## **Packaging**

This material is supplied in various types and sizes of containers. Please contact Glassbond Sales for further details.

## **Shelf Life**

Sealing cement No. 33S Powder has a shelf life of one year when stored in unopened, tightly sealed containers in a dry location at 21°C (70°F). If there is a doubt as to the quality of the material, consult Glassbond.

## **Caution**

Consult the Material Safety Data Sheet 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. Users shall determine the suitability of the product for intended application before using.

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