

Glassbond Sauereisen Alumina Potting Cement 16-2L

Characteristics

- Extended pot life of #16
- Heat conductive
- High electrical resistance
- Easy to mix and apply
- Volume stable
- Withstands temperatures to 2012°F (1100°C)
- Odourless
- Colour stable up to 600°C

Recommended For

Heating elements
Induction coils
Lamp assemblies
Resistors

Description

Glassbond Sauereisen Alumina Potting Cement 16-2L is primarily used where high electrical insulation and thermal conductivity are desired. 16-2L is a phosphate-bonded material that cures by a chemical set and is ideal for potting applications subject to high temperature. Formulated as an alumina-filled cement, 16-2L is non-corrosive and compatible for applications with ceramics, glass and most metals. The material is supplied in powder form and mixes with water.

Physical Properties

Colour	White
Coefficient of thermal expansion	5.00 x 10 ⁻⁶ /°F (9.00 x 10 ⁻⁶ / °C)
Compressive strength @ 24 hours	1,750 psi (123.2 kg/cm ²)
Dielectric strength	55-63 Volts/Mil (2165.3-2480.3 Volts/mm)
Final set	280 minutes
Initial set	190 minutes
Mix ratio (powder: water, by weight)	100:12
Maximum service temperature	2012°F (1100°C)
Pot life	115 minutes
Viscosity (AND SV-100, ≈27.7°C)	39,400cP
Density (dry, 24 hours at ambient)	169pcf (2.70g/cm ³)
Density (wet)	170pcf (2.72g/cm ³)

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 – Alumina Potting Cement 16-2L should be thoroughly remixed before using. Weigh out 100 parts of 16-2L powder and 12 parts potable water. Place powder in a clean mixing container. Add water to the powder at one time while mixing, do not add water gradually. Continue mixing until a smooth uniform consistency is obtained. Mixing may be done with a slow-speed mixer or by hand with a spatula. 16-2L 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. Maintain batch sizes accordingly to limit wastage.

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.

GRADE: 16-2L

DATE: 06.06.2022

REVISION: 02

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Setting/Curing

Sealing cement 16-2L 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 115 minutes at 21°C. If it is desired to accelerate the cure, low temperature oven drying at 82°C 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 16-2L 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

Alumina Potting Cement 16-2L has a shelf life of one year when stored in unopened, tightly sealed containers in a dry location at 21°C. 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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