



constructive solutions

Expocrete S

(Grout Fix)

Two part pourable epoxy resin based grout

Uses

Expocrete S has been designed for grouting in vertical starter bars during construction, grouting in holding down bolts into existing concrete, levelling chipped or spalled concrete floors, machine and column base grouting and as a general purpose pourable grout.

Advantages

- Outstanding cohesive and adhesive strength.
- Excellent adhesion to concrete, metal and most other surfaces.
- Will adhere to damp concrete.
- Pourable.
- Fast curing.
- Cures with negligible shrinkage.
- Excellent chemical and water resistance.

Description

Expocrete S is a two part pourable epoxy resin based grout with high strength adhesion to concrete, steel and most other building materials. Excellent resistance to both physical and chemical attack. Formulated specifically for grouting and levelling.

Technical support

Fosroc offers a comprehensive range of high performance, high quality repair, maintenance, and construction products. In addition, Fosroc offers a technical support package to specifiers, end users and contractors, as well as on site technical assistance in locations all over the world.

Durability

Expocrete S exceeds the 50 year minimum requirements of the durability provisions of the New Zealand Building Regulations 1992 Clause B2 providing:

- It is used in strict accordance with the manufacturer's recommendations.
- It is used within the design parameters stated in this data sheet.
- It is used in conjunction with other approved building systems and materials.

For conditions outside those stated in this data sheet, contact our Technical Advisory Service.

Fosroc reserves the right to modify this time period, depending on but not limited to climatic, site and environmental conditions such as chemical attack, abrasion, water immersion and adverse climatic and temperature conditions.

Limitations

Expocrete S is recommended for use only as described in the Uses section of this datasheet.

Properties

Form:	Uncured: Two parts, paste
Pot Life:	30 minutes at 25°C 15 minutes at 35°C
Curing/Strength:	Initial cure - 24 hours at 25°C yields >70 N/mm ² Final cure - 7 days at 25°C yields 110 N/mm ² 75-80% of final strength is achieved after 48 hours at 25°C
Colour:	Light grey
Solids content:	100%
Specific gravity:	Part A 1.48 Part B 1.53 Mixed 1.50
Physical or Chemical change:	Chemical cure
Application temperature range:	5°C to 50°C
Service temperature range:	Minus 40°C to +60°C
Toxicity:	Non-toxic when cured
Physical strengths:	Tensile strength: 23.5 N/mm ² (ASTM C307-83 revised 88) Compressive strength: 110 N/mm ² (ASTM 579-82) Both cured at 25°C for 7 days
Flammability:	Non flammable
Chemical resistance to occasional spillage:	Excellent to common acids, alkalis and solvents
Thermal expansion:	Coefficient of linear expansion 5.0 x 10 ⁻⁵ cm/cm/°C (ASTM C531-85)
Shrinkage:	<0.01 % (ASTM C531-85)
Electrical resistance:	10 ⁸ Ω.cm

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Instructions for use

Note

Use only when the temperature is between 5°C and 50°C on day of application and following 96 hours, otherwise incomplete cure and poor adhesion will result. Do not use over paint films, unsound plaster or unsound concrete.

Excessive exposure to freezing temperatures may cause the part B to solidify. In this case, heating to 50°C for one to two hours will reliquefy the product, which then must be cooled to below 25°C before mixing.

Surface Preparation

Vigorously wire brush or grind all surfaces to remove all laitance, dust, dirt, oils, grease, rust, and any paint, plaster, and loose material. Thoroughly clear holes drilled for bolts and starter rods by air blasting, after drilling, with oil free air.

Degrease steel rods and bolts with Fosroc TCN Thinner/Cleaner. Galvanised steel surfaces must be passivated with a suitable passivating solution before applying Expocrete S.

When covering exposed reinforcing steel, remove all rust and apply a zinc rich primer such as Fosroc Nitoprime Zincrich.

Expocrete S will tolerate surface dampness, but maximum adhesion usually requires dry surfaces.

Mixing

Part A and Part B are packed in the correct proportions. ALWAYS MIX WHOLE UNITS. Thoroughly mix both parts separately, and then add ALL of Part A to ALL of Part B.

Using a Fosroc No. 2 Mixer (Jiffy Mixer), mix for a minimum of 5 minutes at a speed of 300-500 rpm, until material is totally homogeneous and a uniform streak-free colour. For 20 litre units, large mixing blades and/or longer mixing times will be necessary. Incorrectly mixed compound will not cure correctly.

In colder conditions, storing at approximately 25°C for 12 hours prior to use will make mixing easier. Do not add solvents. Do not mix and hold in bulk as this will hasten curing.

Application

After mixing Expocrete S can be applied immediately, and should be applied within 30 minutes. Crimping the side of the tin to create a funnel can assist pouring.

Once Expocrete S becomes difficult to apply, discard, as working life has been exceeded. Do not attempt to remix and do not add solvents. Do not mix and hold in bulk as this will hasten curing.

When used for grouting in starter bars and bolts, the bars and bolts should be supported for at least 6 hours to prevent movement while the material cures.

Tooling

Expocrete S can be tooled off with a steel trowel or float, which has been kept clean with white spirit.

Cleaning

Detergent solution can be used to clean up uncured material on hands or equipment, or alternatively, use Fosroc TCN Thinner/Cleaner. Do not use these solvents on skin. Wash hands thoroughly with an industrial hand cleaner.

Estimating

Packaging

Expocrete S is supplied in 1 litre, 4 litre and 20 litre units. Each unit consists of hardener (Part A) and compounded resin (Part B), packaged in separate containers in the correct ratios.

Coverage

1m² at 1mm thick/litre

Storage

Shelf life 12 months when stored in original containers in a dry place below 35°C.

Health and safety

Warning

Expocrete S may be harmful if swallowed or inhaled and may cause skin or eye irritation.

Precautions

Wear protective (PVC) gloves and eye protection when mixing or using. Epoxy materials are skin sensitising to some people. Ensure there is adequate ventilation during mixing and using.

Fuller details on each of the products mentioned are available on the product Material Safety Data Sheets. To ensure no harm is caused to persons using Fosroc products, it is recommended that the appropriate Material Safety Data Sheets are read by all concerned. Contact Fosroc for copies.

First Aid

Swallowed: Do not induce vomiting, give a glass of water to dilute and contact a doctor immediately.

Skin: Remove contaminated clothing, wash with warm, soapy water. Do not scrub.

Inhaled: Remove person to fresh air. Get medical advice if breathing becomes difficult.

Eyes: Hold open and flood with water for at least 15 minutes. Get medical advice.

For emergency information contact the National Poisons Information Centre, phone 0800 764 766 (0800 POISON).



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Disposal

If spilt, absorb with clay, sand or earth. Collect and seal in properly labelled metal containers. Dispose of according to local authority regulations. Do not dispose of down drains or into local waterways.

Additional information

Expocrete S is one product in the Fosroc range of grouts and anchors. Other product ranges include admixtures, surface treatments, flooring, roofing, concrete repair and protection, joint sealants, waterproofing, adhesives and architectural coatings.

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Expocrete S is the trademark of Fosroc International Limited.



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May 2004
NZ/E18/08

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