

Technical Datasheet (TDS)

Ferrocem 527

CHLORINE & WATER PRESSURE RESISTANCE TILE GROUT FOR POOL-GAP 2-10 MM.



Ferrocem 527 is a special type of grout specifically designed for grouting ceramic tile in area of pool, spa bath. Made of cement, polymer and special additives to increase resistant efficiency such as waterproofing, chlorine and salt water solution. Suitable for gap width 2-10 mm. Interior & exterior use.

Advantages

- Chlorine & Salt solution resistance.
- Water pressure resistance.
- Thermal cyclic resistance.
- Waterproof.

Area of use

- Swimming pool.
- Spa tub.
- Balcony.
- Steam bath room.

Standards and compliances

Ferrocem 527 is manufactured under standard meets to ASTM C 109/C 109M-01, ASTM C 348-02, ASTM C 596-01, ASTM C 596-01

Physical properties

Properties	Value
Appearance	Powder
Density, kg./litre (Approx.)	1.37 kg./litres

Technical properties

Properties	Values	Standards
Compressive strength, MPa. (Approx.) - At 7 days - At 28 days	30.17 MPa. 33.64 MPa.	ASTM C109/ C109M-01
Flexural strength at 28 days, MPa. (Approx.)	6.27 MPa.	ASTM C 348-02
Bond strength to concrete at 28 days, MPa. (Approx.)	0.66 MPa.	ASTM C 952-02
Drying shrinkage at 28 days, % (Approx.)	-0.23%	ASTM C 596-01

Method statement

Ferrocem 527

Step 1 Surface Preparation

- Should start grouting after tiling with tile adhesive cement then 24 hour so that there is sufficient adhesion tiles and trampled on a walk.
- Check groove grout blow dust or cleaning clean tiles not free of clogging, oil stain, dirt and dust so that the grout has a good adhesion.

Step 2 Mixing

- By weighing (Water 18-20%): Water mixing ratio of approx. 180-200 g.
 : Tile grout 1 bag (1 kg.) *Weighing more accurate measure would be effective.
- By volume: Mixing tile grout powder 5 cups (Not tap): Clean water 1 cup

Mixed order

Prepare clean water and pour into mixing container first. Then pour cement grout into to reduce lumps.



How to mix

Mixing by hand by slowly stirring the mixture until reach homogeneous. Left the mixture cure 3-5 minutes then urge by strirring again and start a patching works on tile joint. In case of big batch mixing, it is recommended to mix by using electrical driller and plan the work to suit the number and duration of the joint. Grout should be used in 10-20 minutes, while it should be stirring periodically.

Step 3 Using

Tiles joint must be dry, clean, no debris on the tiles.

It is recommended to start tile grout works at least 24-48 hour after ceramic tile installation is done. Bring a tile grout mixture patch into a prepared joint with rubber trowel. Try to patch in 60 degree angle to tile joint and wipe the laitance off the tile surface with moisted cloth 2-4 hour after the grout has dried. Left dried 1-3 day before light traffic. Do not clean with any detergent at the early curing stage (until 28 day). Application temperature should be between 20-35 °C.

Limitations/Cautions

- Do not use tile grout in contact with concentrated chlorinated and salt water.
- Mixing exceed of water will cause colour distortion and decreased compressive strength.
- Use all mixtures within 20 minutes. Do not add water again.

Technical support

Customers can contact the sales department of the company at sale@ferroproduct.co.th to inquire about product usage methods. Furthermore they can also request information or organize the following activities:

- 1. Request for the latest updated data sheet.
- 2. Request for the sale conditions document and the product price list.
- Schedule a technical staff visit to demonstrate the products at the customer's job site by filling out the "Demonstration request form" prior to the product purchase.
- 4. Schedule a technical staff visit to provide product usage training to the customer's workers at the job site by filling out the "Worker training request form".
- 5. Schedule training for the customer's foreman at the company's training center (Ferro training center) by filling out the (Foreman training request form).



Coverage

Coverage by approx.

Tile size	10 x 10 CM.	20 x 20 CM.	30 x 30 CM.	40 x 40 CM.
Gap width	Approx. kg./m²	Approx. kg./m²	Approx. kg./m²	Approx. kg./m²
2 mm.	0.40	0.20	0.13	0.10
3 mm.	0.60	0.30	0.20	0.15
4 mm.	0.80	0.40	0.27	0.20
5 mm.	1.00	0.50	0.33	0.25
6 mm.	1.20	0.60	0.40	0.30
8 mm.	1.60	0.80	0.53	0.40
10 mm.	2.00	1.00	0.67	0.50

Package

1 kg./bag (24 bags/carton, 45 cartons/pallet). Can be available in 20 bags/carton.

Cleaning tools

Wash with clean water before Ferrocem 527 hardens. Dry cases should be extracted with mechanical force.

Storage

- 1 year
- Keep in dry shaded area, temperature 23 °C + 2%, Humidity 50 + 5%RH (Conform to ISO 554)

Health and safety instructions

- May cause health effect :
- Eye: May cause eye irritation.
- Skin: May cause skin irritation.
- Ingestion: May cause vomiting or nausea if swallowed.
- Inhalation : No serious effect.



- Inhalation: Move to fresh air, oxygen support if necessay. In case of breathing difficulty is occurred continuously, should taken care by medical treament.
- Eye: Flush with clean water at least 15 minute. if irritation still exist, see medical attention.
- Skin: Clean the irritation area with mild soap and water, if burning is still exist, see physician immedieatly.
- Ingestion: Do not induce vomiting, call physician immedieatly.



Disposal

Ferrocem 527 is composed of cement please do not put waste into public drainage, It is recommended to let the cement dried with sunlight.

Transportation and shipping data

THAI DOT: Not regulated. IMO: Not regulated. USA DOT: Not regulated. IATA: Not regulated.

RID/ADR: Not regulated.



Size

- 527/1 White No.0810 (1 kg./bag, 24 bags/carton, 45 cartons/pallet)
 Can be available in 20 bags/carton
 Code FG-5IC-8858915255549
- 527/1 Dove gray No.0874 (1 kg./bag, 24 bags/carton, 45 cartons/pallet)
 Can be available in 20 bags/carton
 Code FG-5IC-8858915255587
- 527/1 Dark gray No.0879 (1 kg./bag, 24 bags/carton, 45 cartons/pallet)
 Can be available in 20 bags/carton
 Code FG-5IC-8858915255594
- 527/1 Cream white No.0823 (1 kg./bag, 24 bags/carton, 45 cartons/pallet)
 Can be available in 20 bags/carton
 Code FG-5IC-8858915255570
- 527/1 Cream pink No.0822 (1 kg./ bag, 24 bags/carton, 45 cartons/pallet)
 Can be available in 20 bags/carton
 Code FG-5IC-8858915255501
- 527/1 Dark green No.0839 (1 kg./bag, 24 bags/carton, 45 cartons/pallet)
 Can be available in 20 bags/carton
 Code FG-5IC-8858915255815
- 527/1 Pool blue No.0846 (1 kg./ bag, 24 bags/carton, 45 cartons/pallet)
 Can be available in 20 bags/carton
 Code FG-5IC-8858915255495

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Product warranty: The company is pleased to replace any product that is clearly proven to be defective due to manufacturing processes with a new products of equal value to the portion that is defective. Refunds are not available. Customers must be notify us of replacement within 7 days from the order date. Additionally customers can't claim damages resulting from direct or indirect using of the materials, as well as delays in delivery by the company. Furthermore replacements can't be made for errors in using that arise from customers negligence without consulting the sales staff or technical documentation provided by the company. The company reserves the right to amend manufacturing formulas or new packaging designs without prior notice. Therefore customers must be request the data sheet and sale conditions from the company before actual using and before each purchase. By doing so the company assumes that customers have understood and agreed to the company's sale conditions before using. (Company products are only allowed for using by individuals who have completed training provided by the company). *For further data please refer to the sale conditions from the company's sale department at sale@ferroproduct.co.th.



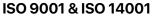
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