

### **Technical Datasheet (TDS)**

# Ferrorez 701 เฟอร์โรเรซ 701

## 2 COMPONENT SEMI-FLEXIBLE EPOXY POLYURETHANE SEALANT

อีพ็อกซี่อุดรอยต่อพรีคาสท์



Ferrorez 701 is a 2 component epoxy polyurethane sealant new technology for grouting precast concrete wall joint. Made from epoxy and high quality polyurethane resin additives, solvent-free have a mixture of chemical and mixture. Provides outstanding properties in the field of plastered smooth, excellent adhesion to concrete, semi-flexible, non-shrink, non-flowable suitable for sealing of precast panel concrete.

#### **Advantages**

- Good adhesion on concrete.
- Non-shrink.
- Flowable.
- High compressive strength.
- High tensile strength.

#### Standards and compliances

Ferrorez 701 is manufactured under standard meets to ASTM C661-15, ASTM D412-16, ASTM D412-16, ASTM C109/109M-20a

#### Area of use

- Grouting precast panel concrete wall joints, interior and exterior building.
- Putty filling a small gap between steel and concrete or concrete and concrete.
- Putty off surface of the concrete crack that will non moving or decorate the eroded concrete surface before apply roller type epoxy.

#### **Physical properties**

Properties	Value	Standards
Colour (A+B)	Gray	-
Density, kg./litre (Approx.) - Part A - Part B - Part A+B	1.75 kg./litre 0.98 kg./litre 1.6 kg./litre	-
Gel duration, minute (Approx.)	>30 minutes	ASTM D2393
Final setting time 30 oC, day (Approx.)	7 days	-

#### **Technical properties**

Properties	Values	Standards
Durometer hardness at 7 days, Type D (Approx)	60	ASTM C661-15
Tensile strength at 7 days, MPa. (Approx.)	6 MPa.	ASTM D412-16
Elongation at break at 7 days, % (Approx.)	8%	ASTM D412-16
Compressive strength at 28 days, MPa. (Approx.)	24 MPa.	ASTM C109/109M-20a

#### **Method statement**

#### Ferrorez 701

- Mixing by cup: pour component B, Black hardener into the component A, White base (Not tight percussion) in a ratio of approx. 1: 1 mixing by cup.
- Mixing weight: mixing ratio 1: 1 by weight part B (Black hardener) 500 g. (Mixture ratio multiplied by specific gravity) into part A (White base) 500 g. (Mixture ratio multiplied by specific gravity) should be mixing approx. 1 kg. spin by low speed driller (400-600 rpm.) until reach homogeneous. Observe by the colour of mixture will turn to be gray. Mixing time is around 1-3 minutes. Should be mixing in shaded area and use a mixing tray container no higher than 10 cm. mixing container height will accelerate the heat reaction to make the epoxy harden faster. Put the epoxy material mixing into the homoginious and putty in filling between groove precast concrete walls joint with general steel putty \*Mixing by weight is more efficient and more accurate than mixing by cup.
- Joint groove at grout the grout in this vertical must be dry, clean, free from dust, moisture and oil stains. Install glue paper on both edges and pulled out as soon as finished maximum groove width should be not exceed 20 mm. and depth no more than 20 mm. Should be dressed to be smooth and beautiful at once. Because when solidify is hard to polish surface.



#### **Limitations/Cautions**

- Working temperature should be between 15-40 °C
- Do not add other materials.
- Should be tool wash with a thinner before the epoxy dry.
- Should be use all at once.
- Should be use a standard measuring device. Incorrect mixing proportions may make the epoxy too soft or hard.

#### **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

Approx. 1.6 kg./litre.

#### **Package**

1 kg./set (A=0.5 kg., B=0.5 kg.) 2 kg./set (A=1 kg., B=1 kg.) 9 kg./set (A=4.5 kg., B=4.5 kg.)

#### **Cleaning tools**

Wash tools with water before material cures. If the mixture is dry, then peel off the mechanical force, such as scraping off.

#### **Storage**

- Shelf life 1 year in unopened container.
- 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**

Ferrorez 701 is composed of epoxy plese 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

- 701/1 (1 kg./set) A=0.5 kg., B=0.5 kg. Code FG-7IC-8858915272430
- 701/2 (2 kg./set)
   A=1 kg., B=1 kg.
   Code FG-7IC-8858915272379
- 701/9 (9 kg./set)
   A=4.5 kg., B=4.5 kg.
   Code FG-7IC-8858915272201



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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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