

Technical Datasheet (TDS)

Ferrofoam 424

HYDROPHILIC POLYURETHANE INJECTION



Ferrofoam 424 is a 2 component, semi-rigid, hydrophillic polyurethane foam injection to stop water leakage. Produced from special MDI polyurethane. With high expansion after react with water. Ferrofoam 424 is flexible floor waterstop repair in concrete structure such as foudation, underground concrete wall, concrete water tank, swimming pool.

Advantages

- Approx. 20 times expansion after react with water.
- Semi-Rigid.
- Stop leak within 30-60 second.

Standards and compliances

Ferrofoam 424 is manufactured under standard meets to ASTM D 891, ASTM D 638

Area of use

- Stop water leaks following a specific area injection.
- Wall-basement floor.
- Swimming pool.
- Dam.
- Concrete structures exposed water.

Physical properties

Properties	Values A	Value B
Colour	Dark brown	Clear yellow
Specific gravity 25 oC (Approx.)	1.005 - 1.205	0.835 - 1.035
Viscosity 25 °C, cps. (Approx.)	50 - 400 cps.	0 - 30 cps.
Flash point, °C (Approx.)	>156 °C	N/A
Dew point, °C (Approx.)	-60 °C	N/A
Mixing ratio by weight	10:1 (A+B)	10:1 (A+B)
Expansion, % (Approx.)	20 time	20 time

Technical properties

Properties	Values	Standards
Time to start expanding upon contact with water, seconds (Approx.)	30 seconds	ASTM D 891
Expansion period ending when contact with water, seconds (Approx.)	60 seconds	ASTM D 638

Method statement

Ferrofoam 424

Mixing ratio

Mixture A : Mixture B = 10:1 by weight. Mixture A : Mixture B = 12:1 by weight.

Mixing by weight

Mix 2 kg. by the mixture B (Catalyst) 200 g. poured into a mixture (PU bass), stirring gently with 2,000 g. (Approx. 30 rpm./minute) using a paddle approx. 10-15 rpm. then pour into a high-pressure unit injectors. Do not mix by spinning with drill, because it will cause heat and PU. viscous liquid.

How to Install

- Chiseling concrete leakage area to find out the most leakage point.
- Drill concrete to install injection packer.
- Mixed Ferrofoam 424 component B to component A, stirring gently until homogenuos, about 2-3 minutes. pour the mixture material. Into the hopper of the machine high pressure injection such as WAGNER.
- Wear eye and face protection during application.
- Decorate the injection point with fast-setting waterstop mortar (Waterplug-Ferroplug 519)
- Clear channel, hose and sprayed with solvent base cleaner.
- Left dried 3-7 days if no leakage or only damp appear. It is reccommended to coat with crystallized waterproofing mortar. (Ferropoof 423)



Limitations/Cautions

- Do not wash the injection hose with water, the PU residue will expand and clog in side the hose.
- Monitor the concrete leak repair at least 1 week the leakage may move to another area.
- Do not use to repair concrete expansion joint or moving crack.

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 kg./litre (A+B)

Package

22 kg./set (A+B)

Cleaning tools

Wash with Xylene only. Do not use water.

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

Ferrofoam 424 is composed of polyurethane 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

22 kg./Set (A+B) Code FG-4IC-8858915249357

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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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