

# **Technical Datasheet** (TDS)

# Ferrocure 114

CONCRETE CURING COMPOUND & SEAL (PARAFFIN WAX BASED)



Ferrocure 114 is a paraffin emulsion concrete curing compound made of special emulsion that can be a thin film forming membrane to control a water loss of fresh concrete due to fast hydration caused by strong sun or windy condition. Ferrocure 114 is a white milky liquid curing compound and become transparent after dry. It can help reducing hair line crack of concrete surface and keep a compressive strength as concrete mixing design. This curing compound type is much higher efficiency when compare to sodium silicate type.

## **Advantages**

- Reduce hairline crack from too fast water loss during hydration.
- High performance film upon fresh concrete surface to control a slowly water vapour transmission rate during concrete hydration period or initial setting.
- Strengthen the concrete surface.
- Economical compare to curing with water and sacks.
- Milky white liquid will change and become a clear transparent film after drv.

#### Standards and compliances

Ferrocure 114 is manufactured under standard meets to TIS 841-2532

#### Area of use

- Use as a concrete curing compound for exterior use only.
- Curing and coating concrete in dam work, road, airplane parking lot, pole, beam, bridge.
- Curing concrete in area with not paint or ceramic tile installment after.

## **Physical properties**

Properties	Value	
Chemical type	Vinyl acetate copolymer	
Form	White liquid	
Specific gravity, kg./litre (Approx.)	~1.02 kg./litres	
Viscosity (Needle No. 2, round 60), mPa.s (Approx.)	40-42 mPa.s	

# **Technical properties**

Properties	Criterion	Ferrocure 114	Standard
Coating ability	-	Pass	TIS 841-2532
Storage stability	-	Pass	TIS 841-2532
Water retention at 72 hours, kg./m2 (Approx.)	<0.55 m2	<0.26 kg./m2	TIS 841-2532
Drying time	-	Pass	TIS 841-2532
Non volatile content, % (Approx.)	Depends on the manufacturer	21.88%	TIS 841-2532

<sup>\*</sup>Drying time 4 hours, touchable, not sticking to fingers 12 hours dry not sticking to feet.

# **Method statement**

## Ferrocure 114

Use wood or steel rod as a stir, slightly stir 1-2 minutes to disperse all sediments at the bottom of drum come in to homogeneous white liquid. Then apply by low pressure spray and try to spray totally cover all over initial set concrete surface (2-3 hours after pour concrete).

### Instructions for use

- Should be spray 2-3 hours after the concrete initial setting.
- Do not mixing with water or other solvents.
- Stir gently with a wood, drill, or shake before use.



## **Limitations/Cautions**

- Do not spray when the wind is strong and should be spray over the entire area do not spray so thick that a white precipitate is formed.
- Do not spray upon standing water ponding.
- When the concrete is dry after spray can not paint or can be tile over.
- Do not use the spray on industrial floor surface that need to be paint over with epoxy.
- Ferrocure 114 is much high quality than sodium silicate curing compound due to water retention below 0.55 kg. while sodium silicate allows 2-3 times more water to evaporate therefore the compressive strength value during the first 3 days of concrete may be lower than should be.

## **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

On rough concrete surface spray or paint Ferrocure 114 at the rate of approx. 5-6 m2/litre.

# **Package**

5 litres/gallon (4 gallons/carton, 40 cartons/pallet). 20 litre/gallon (24 gallons/pallet). 200 litres/drum.

# Cleaning tools

Should be wash mixing tool with clean water immediately before the Ferrocure 114 dry. Dry cases should be extracted with mechanical force.

## **Storage**

- 1 year in unopen container.
- Keep in dry shaded area, temperature 23 oC + 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**

Ferrocure 114 is composed of paraffin, hydrocarbon disposal do not put waste into public drainage, It is recommended to leave the dry 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

- 5 litres/gallon (4 gallons/carton, 40 cartons/pallet) Code FG-1IC-8858915212559
- 20 litres/gallon (24 gallons/pallet) Code FG-1IC-8858915211347
- 200 litres/drum Code FG-1IC-8858915211415

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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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