

# HYCHEM SF25

DATA SHEET



**HYCHEM**  
EPOXY SYSTEMS

Hychem SF25 is a pigmented, two-component, water-based epoxy coating with very low odour and VOC's (volatile organic compounds). It is economical, has excellent early water resistance, and is hard wearing, waterproof and oil proof. Aggregates can be incorporated to achieve desired slip resistance.

## USE

SF25 is recommended for use as a protective coating on concrete surfaces exposed to chemicals, foot and light vehicular traffic. Since it is a very economical product it is particularly suited to large areas such as car parks and warehouses.

## FEATURES & BENEFITS

- Economical
- Water based
- Excellent adhesion to damp concrete
- Good curing properties
- Very good early water resistance
- Very low VOC emission (Green Star VOC content certificate available)
- Very low odour
- Wide colour range

## TYPICAL APPLICATIONS

- Schools and Institutions
- Garages
- Car parks
- Back of house areas
- Stock & Plant rooms
- Workshops

## CHEMICAL RESISTANCE

Acids	Alkalis	Solvents	Oils	Mechanical Fluids
Hydrochloric 10%	Ammonium Hydroxide 20%	Toluene	Crude	Skydrol
Nitric 10%	Sodium Hydroxide 20%	Turpentine	Mineral	Brake Fluid
Sulphuric 10%	Potassium Hydroxide 20%	Xylene	Engine	Petrol
Phosphoric 10%	Bleach	White Spirit	Vegetable	Antifreeze

## APPLICATION GUIDELINES

SF25 can be either rolled or airless spray applied. It can be diluted up to 25% with water for easier application.

This product should be applied at temperatures above 10°C and below 80% humidity.

Approximate application data for 20°C and 65% relative humidity.

Mix ratio by volume (Resin: Hardener)	1:3
Pot life	1 hour
Tack free time	6 hours
Recoat time	8 hours
Hard cure time	24 hours
Full cure	5 days

Apply 2 coats at 6 – 8 m<sup>2</sup> per litre.  
Dry Film Thickness approximately 100Qm.

## Surface Preparation

- Concrete substrate shall be firm, clean and dry with a compressive strength of 25 MPa and surface tensile strength of 1.5 MPa minimum.
- New concrete must be allowed to cure for a minimum of 14 days.
- Repair imperfections (holes and cracks) with an epoxy patching compound such as Hychem GP where necessary.
- Remove surface laitance, contaminants, coating, curing compound and all weak and loose materials.
- Prepare concrete surface by water blasting or diamond grinding to provide the appropriate surface profile for optimum mechanical keying.

## Pre-conditioning product

It is important to note that even when the application environment is warm, products which have been stored in cold or cooler conditions should always be pre-conditioned ideally to 20-25°C to ease mixing, application and help avoid other potential issues such as amine bloom or blushing.

Applying a cold product in a warm environment is not recommended.

## Mixing – Do not mix resin, hardener and water at the same time.

- Resin and hardener must be mixed before the addition of any water.
- Mix with a jiffy mixer at a speed of 500 rpm to avoid incorporating excessive air into the mix.
- Mix for 2 minutes, scrape down the sides of the mixing container and mix for another minute to ensure the mix is homogeneous.
- Up to 25% water can be added and mixed until completely homogenous

## APPLYING

### Smooth Finish

- Apply by brush, roller or airless spray at a rate of 6 – 8 sqm / litre. Apply 2 coats.

### Non-Slip Finish

- If a fine non slip finish is required, it is possible to mix approximately <100# aggregate into SF25 and roll for even distribution.
- If a coarser non slip finish is required then aggregate should be broadcast into the wet applied product and sealed with one or more subsequent coats.

## PACKAGING

12 Litre. With 25% water added this kit will cover approximately 50m<sup>2</sup> with 2 coats.

Bulk packaging is available.

## Safety Precautions

- Wear gloves, eye protection and overalls during mixing and application.
- Ensure there is adequate ventilation and avoid breathing the vapour

## SHELF LIFE

12 months from date of manufacture when stored under shelter at 25°C and in original un-opened container.

## WARNING – ENVIRONMENTAL CONDITIONS

Temperature and the surrounding atmospheric conditions will play a part in the curing process of all epoxy products. Under conditions of low temperatures and high humidity the final cured surface finish can be adversely affected potentially resulting in poor gloss retention, discolouration over time, poor overcoatability and intercoat adhesion. Quite often these conditions will result in the formation of a white film over the surface often evident after contact with water. This chemical reaction with the atmosphere is commonly referred to as "amine bloom" or "amine blush".

If this occurs then the existing coating will need to be abraded to completely remove the affected surface to ensure the adhesion of subsequent applications. In some cases partial or complete re-priming may be necessary.

Attention also needs to be paid to the substrate temperature which should be at least 3°C and preferably 5°C above the dew point during the curing phase.

Industry standards recommend the accurate recording of times and dates, batch numbers, consumption rates and environmental conditions including substrate and air temperatures, humidity levels and dew point readings during both the application and curing processes. Full material warranties cannot be provided unless all the relevant data has been recorded accurately.

If in doubt consult the Hychem technical department for advice.

### NOTE: Customer responsibility

*The technical information and application advice given here is based on the best information available at the time of print. As the information herein is of a general nature, no assumption can be made as to the products suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation.*

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*If unsure contact Hychem for further technical advice before proceeding.*

