HYCHEM SUPAFLOOR T

Thixotropic, high build epoxy coating – 100% solids

* HACCP Australia & Green Star Certified

DATA SHEET

HYCHEM
EPOXY SYSTEMS

Hychem SupaFloor T is a roller applied, thixotropic, high build, multi-purpose, solventless epoxy coating designed to be used as either a vertical grade coating or as a floor coating with a stippled / textured finish.

For increased anti-slip, SupaFloor T can be used in conjunction with various aggregates including quartz, bauxite or aluminium oxide to produce a range of anti-slip finishes that conform to the Australian Standards SA HB 198/2014 slip resistance to pedestrian surfaces guidelines.

USE

SupaFloor T is recommended for use as a medium and heavy duty floor & wall coating for industrial and commercial applications.

TYPICAL APPLICATIONS

- Schools, hospitals and public buildings
- Prisons
- Retail areas
- Domestic and commercial garages
- Back of house areas
- Stock & Plant rooms
- Workshops
- Pharmaceutical Industry
- Laboratories
- Food and beverage Industry

FEATURES AND BENEFITS

- Textured, high gloss finish
- Can be modified with the addition of aggregates to provide a variety of anti-slip textures
- High resistance to mineral acids
- High resistance to caustic and salt solutions
- High resistance to petroleum oils
- Versatile
- Abrasion and impact resistant
- High mechanical strength
- Non flammable
- Cures rapidly
- Seamless
- Excellent resistance to early water spotting
- Fast curing hardener available*

TECHNICAL PROPERTIES @25°C – (STANDARD HARDENER)

Pot life	20 minutes
Tack free time	8 hours
Recoat time	8 – 24 hours
Application temperature	10 – 30°C
Cure time	24 hours – foot traffic 3 days – light mechanical traffic 7 days – full cure
Hardness Shore D – 7 days	78
Compressive strength	75 MPa

APPLICATION GUIDELINES

Surface Preparation

Prior to the application of SupaFloor T, the substrate must be thoroughly prepared.

- The concrete substrate must be firm, clean and dry with a minimum compressive strength of 25 MPa and a minimum surface tensile strength of 1.5 MPa.
- New concrete must be allowed to cure for a minimum of 28 days.
- Remove all surface laitance, contaminants, existing coatings, curing compounds and any weak or loose materials.
- Prepare the concrete surface by Grinding, Shot Blasting, Scarifying, Ultra High Pressure Water Jetting or Scabbling to provide the appropriate concrete surface profile (CSP) for optimum mechanical keying.
- The extent of surface preparation required is dependant upon but not limited to the thickness of the coating system to be applied. It is highly recommended that all surface preparation is carried out in accordance with industry standards and publications such as NACE 02203 item No. 22420 or ICRI Technical Guideline No. 03732.

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.

Application

The moisture content of the concrete must be below 6%.

Mix only enough quantity that can be applied within the work life which is temperature dependent.

Prior to the application of SupaFloor T it is preferable to prime all new floor surfaces with either E100 or GPT. In some cases, re-coating existing coatings in sound condition may not require priming but only after thorough preparation. For tilt panel or FC sheet surfaces a prime coat of either E100 or E500P is required. For blockwork surfaces a render coat of E500T prior to priming may be necessary.

If in doubt consult the Hychem technical department for advice.

Roller Application

1. Add pigment pack to part A resin and mix thoroughly with a low speed mechanical stirrer until complete uniformity is achieved. Add part B hardener and again mix until uniform. This should be achieved in approximately 3 minutes.
2. Apply the mixed product at a rate of approximately 6–8m^2/litre/coat (flooring) and 7–10m^2/litre/coat for vertical applications over primed surfaces.
3. For anti-slip applications that require a more textured finish, add up to 10% white aluminium oxide aggregate by volume of the total mix. Suitable grades include CA100, CA80, CA60 & CA46 which can provide R10 to R11 profiles. For applications requiring R12 to R13 finishes a base coat of SupaFloor T is applied and whilst still wet broadcasted with either CA36, CA30 or CA24 to refusal. The surface is then sealed with a minimum of 1 coat and possibly 2 coats of either regular SupaFloor or SupaFloor T.

Application guidelines continued...

4. NOTE: For coarse textured spread & sprinkle applications we recommend using regular SupaFloor rather than SupaFloor T due to its superior flow characteristics.
5. SupaFloor T can be applied as a top coat over regular SupaFloor which has been applied as either a roller applied coating or a self smoothing finish to provide the desired textured finish.
6. To assist workability under certain conditions SupaFloor T can be diluted using Xylene at a maximium rate of 10% by volume where necessary. Please note this may affect pot life and cure times slightly.

MIXING RATIOS

Part A Resin Neutral	5.5 kg
Pigment (weight will vary with colour)	500mls
Part B Hardener	2.1 kg

PACKAGING

SupaFloor T Neutral	7.6 kg kit

This kit will yield 6.5 litres with a 500 ml pigment pack

CONSUMPTION RATES

1 x 6.5 litre kit of SupaFloor T will cover approximately 40–45m^2 as a floor coating and 50–60m^2 as a vertical coating for walls.

These consumption rates are theoretical and can vary due to the porosity and the profile of the surface being coated.

Please allow for wastage as well.

SAFETY PRECAUTIONS

Wear appropriate personal protection equipment. Gloves, eye protection, mask and overalls should be used during mixing and application.

SHELF LIFE

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

CHEMICAL RESISTANCE

Different epoxy products vary in their resistance to chemicals. Always ensure that the correct product is chosen for the service environment to be encountered. If in doubt contact your Hychem representative or the Hychem technical department for advice. Chemical spillage of acids and sanitizing agents may attack the pigments used in the coating and result in discolouration.

COLOUR

SupaFloor T is an industrial flooring finish which may discolour on exposure to UV light from the sun or an artificial source. The severity of discolouration is dependant on colour choice. Any such discolouration has no effect on the performance of the product.

* FAST CURE OPTION

A fast curing hardener may be used with SupaFloor T which will reduce the cure time to approximately half the standard system. Note though, XE40 Hardener may not necessarily give the same gloss/finish as the conventional SupaFloor T hardener.

CURE TIMES @ 25°C USING XE40 RAPID HARDENER

Pot life	15 minutes
Tack free time	3 hours (approximately)
Recoat time	3 – 24 hours (approximately)
Cure time	6 hours – light foot traffic 24 hours – light mechanical traffic 7 days – full cure

MIXING RATIOS – USING XE40 HARDENER

Part A Resin	5.5 kg Neutral
Pigment (weight will vary with colour)	500 mls
XE40 Hardener	1.7 kg

This kit will yield 6.2 litres with a 500ml pigment pack.

See XE40 Technical Data Sheet for further information.

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.

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ISSUE NUMBER 180416