HYCHEM SF32

Heavy duty general purpose solventless epoxy coating



HYCHEM SF 32 is a solventless, chemical resistant, two component epoxy coating with excellent resistance to early water spotting. Compared to HYCHEM SF20 it has superior resistance to organic acid exposure.

USE

HYCHEM SF32 is recommended for industrial projects in the food industry where absolute colour stability in light pastel shades is not a prime prerequisite. It is not recommended for exposure to hot oils and fats.

FEATURES AND BENEFITS

- Best balance of performance vs price
- Chemical resistant to petroleum oils, dilute acids and alkalies, salts & hypochlorite solutions
- Durable 100% solids provides a 500 micron DFT (two coat application)
- Wear resistant hard wearing even in harsh and punishing environment
- Slip resistance meets AS/NZ 4568 R10; will meet R11 to R13 with quartz aggregates
- Solventless non-flammable
- Odourless does not taint food
- High gloss finish easy to maintain

TYPICAL APPLICATIONS

- Dairy food manufacturing
- Food & beverage production
- Abbattoirs and smallgoods preparation
- Bars & food preparation areas
- Assembly plants & all industrial processing floors

PHYSICAL PROPERTIES @ 25°C

| Specific gravity | 1.30 kg/litre |
|---|--|
| Solids content | 100 % |
| Pot life | 45 mins |
| Mix ratio by volume (Resin:Hardener) | 2:1 |
| Tack free time | 8 hours |
| Re-coat time | 12 hours |
| Cure time | 18 hours - foot traffic 30 hours - normal traffic |
| Film thickness per coat | 200-300 microns |
| Slip resistance ANZ4586:2004 | R10—R13 dependent on anti-slip |
| Colour stability | Fair, only available in dark colours |

CHEMICAL RESISTANCE

The chemical resistance of a material is generally determined by immersing the material in the designated chemical and then seeing whether the material gains or loses were time. The table below gives a guideline as to how HYCHEM SF32 is likely to perform when immersed in a certain chemical. A value of 100 is equal to an absorption were gain of 3%.

| Xylene | 40 | Butyl Cellosolve | 125 |
|------------------|-----|--------------------|-----------|
| Toluene | 200 | МЕК | destroyed |
| Trichlorethylene | 25 | Skydrol | 15 |
| Skydrol | 15 | 50% Caustic soda | 0 |
| 10% Acetic acid | 80 | 70% Sulphuric acid | 10 |
| 10% Lactic acid | 50 | 98% Sulphuric acid | destroyed |

APPLICATION GUIDELINES

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 28 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 Diamond Grinding or light Shot Blasting to provide the appropriate surface profile for optimum mechanical keying.

Priming

 Priming is only required for highly porous surfaces requiring substrate consolidation. When necessary, apply HYCHEM E100 by roller at a rate of 5 to 6 sqm/litre.

MIXING

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

• When required mix colour pack into resin component and blend before adding hardener. Move the mixer around from side to side and top to bottom and scrap the sides of the mixing vessel to ensure thorough mixing. Mix for a minimum of 3 minutes.

APPLICATION

Smooth Finish

- Apply Hychem E 100 Primer (where necessary) using a medium nap roller at a coverage rate of 4-6 sqm per litre depending on the coarseness of the surface. Allow to become tack free before applying HYCHEM SF32.
- Apply first coat of Hychem SF32 using a medium nap roller at a coverage rate of 4 to 6 sqm. Allow to cure to a tack free finish.
- Apply second coat of Hychem SF32 at a coverage rate of approximately 4-6 sqm per litre. Allow to cure for a minimum of 24 hours before subjecting to traffic and 3 days before normal use.

Non-Slip Finish

- Apply as above. Broadcast grit aggregate (size to suit anti-slip requirement) into the first coat while it is still wet and allow to cure overnight.
- Sweep off loose quartz aggregate.
- Apply second coat of HYCHEM SF32 to seal the surface.

 $\label{eq:slip} \textbf{Slip Resistance} \text{ is dependent on the size (grading) of }$

- aggregates used:
- 80 mesh Alumina R 11
- 36 mesh Alumina R 12
- 24 mesh Alumina R 13

CLEAN UP

Xylene can be used for cleaning tools and equipment before the mixed compound begins to harden.

COVERAGE

| Hychem E 100 Primer | 4 to 6 sqm/litre (depending on the porosity and texture of the surface) |
|---------------------------|---|
| First coat | 4 to 6 sqm/litre (depending on the porosity and texture of the surface) |
| Second coat | 6 to 8 sqm/litre |
| Over Trowelled on Topping | 4 to 6 sqm/litre |

SAFETY PRECAUTIONS

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

PACKAGING

HYCHEM SF32 is available as a 6 litre and a 24 litre kit. It is normally supplied as a 3 component kit of resin, colour pack and hardener. It can also be supplied as a premixed coloured resin for larger preordered jobs.

SHELF LIFE

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

WARNING - ENVIRONMENTAL CONDITIONS

Epoxy products are sensitive to the prevailing temperature and humidity at the time of application.

- High temperatures will shorten the pot life and application may become difficult due to insufficient time being available to lay the product.
- Low temperatures and high humidity will result in the epoxy reacting with surface moisture to produce a white powdery finish. To avoid this, epoxy coatings and toppings must not be applied if surface temperatures are below the dew point while the material has not yet cured.
- The white surface finish is only an aesthetic consideration and does not affect the performance of the material.
- Chemical spillage of acids and sanitizing agents may attack the pigments used in the coating and result in discolouration.
- Differing epoxy products have differing resistance to chemicals, always ensure that the correct product is chosen for the service environment to be encountered.

NOTE: Customer responsibility

The technical information and application advice here given 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.

Field support, where provided, does not constitute supervisory responsibility. Suggestions made by HYCHEM either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not HYCHEM are responsible for carrying out procedures appropriate to a specific application.

