



HYCHEM
EPOXY SYSTEMS

HYCHEM PA 300

Hychem PA 300 is a highly versatile polyaspartic coloured coating utilising the latest premium technology. It comprises of a 2-component aliphatic technology delivering a durable protective coating with an excellent decorative finish and UV colour stability. It has excellent long-term resistance to external weathering. PA 300 is rapid curing and has very low odour.

FEATURES AND BENEFITS

- Excellent wear resistance
- Fast curing times
- Re-coatable in 4 hours
- Excellent chemical and stain resistance
- Excellent scratch resistance
- Low temperature curing
- Excellent UV resistance, non-yellowing and high gloss
- Ideal for interior and exterior use
- Easy application
- Low odour
- Very low VOC's

TYPICAL APPLICATIONS

- Ideal as a protective coat over Hychem epoxy coatings
- As a top coat for most concrete and masonry finishes
- Factory, warehouse, garage, restaurant, retail and industrial floors
- Drive ways, walk ways, corridors, steps, walls, balconies
- Add suitable aggregate to conform to a range of slip resistance specifications.

CHEMICAL RESISTANCE

Excellent resistance to many chemicals.

Acetic acid 5%	Hydrogen peroxide 10%
Ammonia 28%	Juice
Ammonium hydroxide	Motor oil
Bleach	Petrol
Brake fluid	Power steering fluid
Coffee	Skydrol
Coolant	Sodium hydroxide 50%
Hydrochloric acid 20%	Sulphuric acid 20%

PRODUCT CHARACTERISTICS

At 23°C and 50% relative humidity

Gloss level	Gloss
Colour	Standard range
Mixing ratio	4:1 by weight
Solids content	100%
Pot life	15 minutes
Touch dry	3 hours
Re-coat	4 hours
Walk on	6 hours
Full cure	48 hours
Application temperature	2°C - 30°C
Spread rate	5-10m ² per litre

Note: Pot life and cure times are significantly reduced in high humidity conditions.

APPLICATION

Surface preparation on concrete

Prior to the application of PA 300, 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 dependent 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.

Very important note: The surface must be dry when applying PA 300.

Surface preparation on timber, plastic or metal substrates

Please contact Hychem technical department for advice.

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

Mixing ratio is 4:1 by weight (4 x Part A: 1 x Part B)

The product is generally supplied as 9kg neutral kit to which 1kg pigment is added.

Mix Pigment into Part A and stir thoroughly until the pigment is incorporated uniformly.

Add Part B and mix until uniform consistency is achieved – do not over mix as this product has a short pot life.

A mechanical stirrer is used for this process to achieve optimum uniformity.

Up to 10% Xylene can be added to thin down product – only do this if specification and site regulations allow. The Xylene should be added and mixed into the pigmented Part A prior to addition of Part B.

If solvent is added, the application rate should be $\geq 8\text{sqm/L}$ to avoid trapped solvent in the film.

PACKAGING

9kg Neutral kit (7kg A + 2kg B) + 1kg pigment.

This 10kg pack yields approximately 6.4L and will cover approximately 40sqm.

COMMENTS

Actual cure times will be dependent on climatic conditions including air and substrate temperature, relative humidity and air movement.

All information is given in good faith and to the best of our knowledge.

Users are encouraged to assess the product under their own conditions and for their own applications.

SHELF LIFE

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

SAFETY PRECAUTIONS

Wear gloves, eye protection, mask and overalls during mixing and application.

Ensure there is adequate ventilation and avoid breathing the vapour.

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.

