HYCHEM

# HYCHEM PA315

## High Gloss, Pigmented Polyaspartic

## Product Description

HYCHEM PA315 is a rapid curing, highly versatile and durable pigmented polyaspartic coating which is comprised of a 2-component, aliphatic resin technology. HYCHEM PA315 delivers superior protection, combined with an excellent decorative finish and UV colour stability. HYCHEM PA315 has excellent long-term resistance to external weathering.

## Typical Applications

- Aviation hangars and maintenance facilities
- Motor workshops
- Public buildings e.g. schools and hospitals
- Prisons
- Plant rooms
- Factories
- Warehouses
- Garages
- Food and beverage processing areas
- Retail areas
- Pharmaceutical and laboratories

## Approvals / Certifications

- Version 1.2: 2017 (Emission testing method CA 01350)
- VOC ASTM D2369-10
- VOC ASTM D3960
- APAS-S0209/1L V3 (Class I)
- Green Star Interiors V1.3-12.1.B — Green Star & As Built
- Green Star Interiors V1.3-13.1.B — Green Building Council of Australia
- CRF Compliant

## Features & Benefits

- Ideal as a coloured topcoat
- High gloss
- Excellent wear resistance
- Rapid curing and return to service
- Excellent tyre stain resistance
- Excellent scratch resistance
- Low temperature curing
- Non-yellowing / UV stable
- Wide ranging resistance to various jet fuels
- Excellent resistance to aviation hydraulic fluids e.g. Skydrol, HyJet etc.
- Excellent resistance to battery acid and caustic compounds
- Excellent resistance to cleaners, detergents, degreasers, organic solvents, lubricating and de-icing fluids etc.

## Technical Data

| | |
|---|---|
| **Composition** | Polyaspartic (2-part) |
| **Colour** | Wide range |
| **Solids Content** | 85 % |
| **Gloss Level** | Gloss |
| **VOC Content** | 89 g/L |
| **Service Temperature** | Up to 65 °C |
| **Chemical Resistance** | Wide ranging including chemical resistance to jet fuels, aviation hydraulic fluids, solvents, acids, caustics, fats and oils. Consult HYCHEM for resistance to specific chemical concentrations. |

## Physical Properties

| | |
|---|---|
| **Scratch Resistance** | Good |

## APPLICATION GUIDELINES

### Surface Preparation

Prior to the application, the substrate must be thoroughly prepared.

- HYCHEM PA315 is designed for application over other coatings. Other coatings include, but are not limited to, HYCHEM epoxies, polyaspartics and polyurethanes which are recommended by Hychem to form part of a complete system.
- The surface must be completely dry.
- All dust, loose and friable material must be completely removed from all surfaces prior to application.

# HYCHEM PA315

## High Gloss, Pigmented Polyaspartic

- Mechanical sanding of the surface may be required e.g. for application of self-levelling epoxies, where high surface tension is a concern, where previous coatings have exceeded their recoat window or where surface contamination is a concern.

### 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 be pre-conditioned, ideally to 20-25°C.

### Mixing (priming)

Mix HYCHEM PA315 resin with Hychem epoxy pigment ensuring the pigment is thoroughly mixed. Mix Hychem PA315 Part A resin with PA315 Part B hardener at 2:1 by volume using a helical mixer at slow speed e.g. <500 rpm for 45 seconds. Do not over mix i.e. avoid unnecessary aeration. Add Xylene (Solvent X) at 5-15% by volume and mix at low speed for a further 45 seconds.

### Application (priming)

Apply by brush and roller at 7-8 m² per litre. Only pour out what material is immediately required as this product has a long pot life and is not prone to an exothermic reaction. Increased surface area / humidity will accelerate curing. The use of roller trays should be avoided if possible, especially in high humidity. Important: the surface must be dry when applying HYCHEM PA315. High humidity will reduce work time, tack free time and curing rate.

## Application Information

| | |
|---|---|
| **Mix Ratio (Part A to Part B)** | 2 : 1 by volume |
| **Application Temperature** | 8 °C to 35 °C |
| **Relative Air Humidity** | < 75 % RH |
| **Pot Life / Working Time @ 23°C** | 30 minutes |
| **Tack Free Time @ 23°C** | 1 - 2 hours (depending on humidity) |
| **Recoat Window (minimum - maximum)** | 2 - 6 hours (depending on humidity) |
| **Packaging — 6L kit** | 3.5L Part A + 500ml epoxy pigment + 2L Part B |
| **Consumption (roller) — low porosity** | 5 – 7 sqm/L |
| **Consumption (roller) — porous** | 2 – 3 sqm/L |
| **Cure Time @ 23°C and 75% RH – Pedestrian** | 4 hours |
| **Cure Time @ 23°C and 75% RH – Mechanical** | 24 hours |
| **Cure Time @ 23°C and 75% RH – Full Chemical** | 36 hours (cure times extend in low humidity) |

## Environmental Conditions

Temperature and the surrounding atmospheric conditions will play a part in the curing process of all resin products. Under conditions of low temperatures and high humidity the final cured surface finish can be adversely affected, potentially resulting in poor gloss retention, discoloration over time, poor overcoat ability and inter-coat adhesion. Quite often these conditions will result in the formation of a white film over the surface, often evident after contact with water. If this occurs, 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 3-5 °C above the dew point during the curing phase. Industry standards recommend the accurate recording of environmental conditions such as 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.

## Safety Precautions

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

## Shelf Life

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

## Storage Conditions

The packaging must be stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between 5°C and 30°C.

# HYCHEM PA315

## High Gloss, Pigmented Polyaspartic

### Chemical Resistance

HYCHEM PA315 is resistant to jet fuel, aviation hydraulic system fluids, battery acids and caustic compounds, cleaners, detergents, degreasers, organic solvents, and lubricating and de-icing fluids. Always ensure that the correct product is chosen for the service environment. If in doubt contact your HYCHEM representative or the HYCHEM technical department for advice.

### Colour

HYCHEM PA315 is supplied pigmented in a wide range of colours and is UV stable / non-yellowing.

### Important Considerations

- This product may only be used by experienced professionals.
- Freshly applied product must be protected from damp, condensation and water during curing. External application should be when there is no risk of rain, condensation/dew, or excessive heat (including hot substrates).
- Ensure adequate ventilation during application and drying to avoid impaired reaction.
- Beware of condensation — the substrate and uncured floor must be at least 3°C above the dew point. If exposure to moisture occurs, the surface must be fully abraded to ensure no risk of amine bloom and subsequent delamination of top coats.
- Ensure consumption of material is uniform to achieve proper appearance, texture and consistent performance.
- If heating is required do not use gas, oil, paraffin or other fossil-fuel heaters. Use only electric-powered warm-air blower systems.
- For consistent colour, ensure material and pigments from the same batch are used for the entire floor/space.
- At low temperatures and low humidities (< 40% relative humidity), curing and recoat times will be affected.

### Warranties and Disclaimers

HYCHEM warrants that this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product is dependent upon the proper use and application of the product by the applicator. HYCHEM has no role in the application of the finished polymer other than to manufacture and supply its components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of the application tools, including trowelling, spray equipment etc. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by HYCHEM.

### Field Support

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.

### Customer Responsibility

The technical information and application advice given in this publication 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 product 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. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

### Legal Notes

The information, and in particular the recommendations relating to the application and end-use of HYCHEM products, are given in good faith based on HYCHEM's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with HYCHEM's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. HYCHEM reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.