

HYCHEM Hyglaze HS

Clear Non-Yellowing Polyurethane Coating

Product Description

HYCHEM Hyglaze HS is a highly versatile and durable, non-yellowing aliphatic, single component clear polyurethane coating. HYCHEM Hyglaze HS delivers superior protection, combined with an excellent decorative finish and UV colour stability. HYCHEM Hyglaze HS has excellent long-term resistance to external weathering.

Typical Applications

- Protective / decorative clear coat over HYCHEM seamless flake flooring systems
- Topcoat for most concrete and masonry finishes, when used in conjunction with a suitable primer
- Encapsulating suitable aggregates to conform to a range of slip resistance specifications

Features & Benefits

- Long working time
- Recoatable in 4 – 6 hours (temperature and humidity dependent)
- Excellent chemical and stain resistance
- Excellent water resistance
- Excellent scratch resistance
- Excellent adhesion to a variety of coatings
- Excellent UV resistance, non-yellowing and high gloss
- Ideal for interior and exterior use
- Single coat application over standard flake finishes
- Contains UV blockers

Technical Data

Composition	Aliphatic polyurethane (single component)
Colour	Clear coating
Solids Content	90 %
Gloss Level	High gloss
Service Temperature	Up to 65 °C

Physical Properties

Viscosity	450 MPa @ 25 °C
Water Resistance	Excellent
Scratch Resistance	Good

APPLICATION GUIDELINES

Surface Preparation

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

- HYCHEM Hyglaze is designed for application over other coatings, primarily applied to concrete substrates.
- Other coatings include, but are not limited to, HYCHEM epoxies, polyaspartics and polyurethanes which are recommended to form part of a complete system
- If application as a clear coat over the substrate is required, consult HYCHEM for advice on suitable clear primers.

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

Hychem Hyglaze HS is a single component polyurethane resin which does not require mixing. Hychem Hyglaze HS can be poured directly onto the substrate or into a roller tray.

Application

Apply by brush and roller at a rate of 3 – 7 sqm/litre depending on surface porosity. Hychem Hyglaze HS can be applied at approx. 5 - 6 sqm/litre in one coat over standard flake. High humidity will reduce work time, tack free time and curing rate.

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Application Information

Mix Ratio	Single pack — ready to use, no mixing or diluting
*Application Temperature	15 °C to 30 °C
Relative Air Humidity	< 75 % RH
Touch Dry	Approx. 12 hours @ 25 °C · Approx. 24 hours @ 15 °C (dependent on humidity - higher humidity will reduce drying time)
Recoat Window (minimum - maximum)	6 – 24 hours (temperature and humidity dependent)
Coverage rate	Approx. 6 sqm/L. Generally 1 coat over low absorbent surfaces; higher absorbent surfaces including some flakes will require 2 coats.
Packaging	4L kit · 20L kit
Cure Time – Pedestrian	Minimum 12 hours after the coating has become tack free
Cure Time – Mechanical	Minimum 48 hours for heavier traffic
*	Curing diminishes significantly below 18 °C

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.

Colour

Hyglaze HS is a clear, non-yellowing coating. It contains UV absorbers which help protect the epoxy undercoats from UV light, reducing the yellowing tendencies of epoxies upon exposure to sunlight or other UV sources.

Important Considerations

- Hyglaze HS is not recommended for areas exposed to tyres, oils or fats e.g. workshops, garages and kitchens. HYCHEM has other products suited to these areas.
- Apply only when the temperature is between 15°C and 30°C and relative humidity is below 75%.
- A second coat should be applied when the first coat is dry and within 24 hours. If a maintenance coat or re-coat beyond that window is required, the surface should be sanded.
- Consult HYCHEM for methods to achieve slip resistant finishes.

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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.