HYCHEM 120

Clear, water based epoxy sealer



DATA SHEET

HYCHEM 120 is a high solids water-based epoxy sealer which requires further dilution with water on site. The product is designed to be a cost effective alternative to older type solvent-based sealers where health, odour and flammability prevent their use. The low VOC rating allows HYCHEM 120 to be used in areas where solvent-based sealers are prohibited. HYCHEM 120 meets the standard of the Green Building Council of Australia.

USE

HYCHEM 120 is primarily used as an anti-dusting sealer for concrete car parks where a gloss sealer is required. This product may be diluted with water.

FEATURES AND BENEFITS

- Higher solids content than solvent-based acrylic sealers.
- · 2-part chemically cured film.
- Chemically resistant, unaffected by hydraulic fluid, grease, petrol and lubricants.
- Scrub resistant, can be cleaned with automatic mobile scrubbing machines.
- Low VOC Emission complies with Green Star requirements.
- High film build, lasts up to 2 times longer than lower performance sealers
- Reduces cleaning and lighting costs.
- Easy application by low pressure spray or roller.
- Solvent free can be used on asphaltic surfaces as well as concrete.

TYPICAL APPLICATIONS

- · Schools, hospitals and public buildings
- · Retail areas
- · Domestic and commercial garages
- Warehouses
- · Car parks
- · Back of house areas
- · Stock and plant rooms
- Workshops

CHEMICAL RESISTANCE

ACIDS	ALKALIS	SOLVENTS	OILS	MECHANICAL FLUIDS
Hydrochloric 10%	Ammonium Hydroxide 5%	Butyl Ether	Crude	Skydrol
Nitric 5%	Sodium Hydroxide 10%	Cyclohexane	Mineral	Brake fluid
Sulphuric 5%	Potassium Hydroxide 10%	10% Ethanol	Olive	Petrol
Phosphoric 5%	Bleach	Ethylene Glycol	Vegetable	Diesel

APPLICATION GUIDELINES

Hychem 120 can be roller or spray applied. It can be diluted up to 100% with water for easier and economical application, although thicker, more comprehensive films will be achieved with less water.

Hychem 120 contains water which needs to evaporate from the film to ensure a film-forming chemical reaction. Good airflow is very important as the ambient air can easily become saturated with moisture due to the evaporating water, particularly in closed rooms. As an example, in a room with 3 metre high ceilings and applying Hychem 120 with 1:1 water dilution, the air would need to be changed approximately 8 times if ambient conditions were 20°C and 60% relative humidity.

If the relative humidity is not kept low enough then the film formed may be tacky, have low gloss and may lack clarity.

Approximate application data for 20°C and 50% relative humidity

Mix ratio by volume (Resin: Hardener)	2: 1
Pot life	1 hour
Tack free time	4 hours
Recoat time	12 hours
Hard cure time	24 hours
Full cure	7 days

Apply 2 coats at 8 m² per litre.

Dry Film Thickness approximately 75µm if diluted 1:1 with water.

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.
- Remove surface laitance, contaminants, coating, curing compound and all weak and loose materials.
- Prepare concrete surface by water blasting or diamond grinding to provide the appropriate surface profile for optimum mechanical keying.

Mixing

Do not mix resin, hardener and water at the same time.

- Resin and hardener must be mixed before the addition of any water.
- Mix with a jiffy mixer at a speed of 500 rpm to avoid incorporating excessive air into the mix.
- Mix for 2 minutes, scrape down the sides of the mixing container and mix for another minute to ensure the mix is homogeneous.
- Up to 100% (1:1) water can be added and mixed until completely homogenous but do not add all the water all at once, add in 2 or 3 stages.

APPLYING

Smooth finish

Apply by brush, roller or airless spray at a rate of 8 sqm/litre.
Apply 2 coats.

Non-slip finish

- If a fine non-slip finish is required, it is possible to mix approximately 80# aggregate or finer into HYCHEM 120 and roll for even distribution.
- If a coarser non-slip finish is required then aggregate should be broadcast into the wet applied product and sealed with one or more subsequent coats.

The amount of water added may need to be reduced to achieve the non slip finish.

PACKAGING

6 litre	With 6 litres of water added this kit will cover approximately 100m² in one coat
60 litre	With 60 litres of water added this kit will cover approximately 1000m ² in one coat
600 litre	With 600 litres of water added this kit will cover approximately 10,000m ² in one coat

SHELF LIFE

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

Disclaimer

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.

