

HI-CHEM EPOXY ENAMEL



PRODUCT USES

Can be applied on walls, floors and suitably primed metal surfaces.



FEATURES AND BENEFITS

Good resistance to a wide range of chemicals and most solvents.

Cures to a hard film with good adhesion and abrasion resistance.

Provides an economical alternative to tiling in bathrooms, showers, kitchens, toilets and low cost housing.

Suitable for surfaces that require frequent cleaning with solvents, detergents or alkaline cleaners.

The cured film is non-toxic. When properly applied and cured, the product is completely safe for direct or accidental food contact, and can safely be used on children's toys and on equipment and working spaces in the food and dairy industry.



PRODUCT INFORMATION

Appearance	High-gloss
Colour	White, Light Grey, Dark Grey and Brilliant Green
Density at 23°C	Approx. : 1.30 kg/L
Solids Content	By weight : Approx. 60% By volume : Approx. 44%
Packaged Viscosity	Viscosity at 23°C : Approx 70 KU
Recommended film thickness	35µm dry; 76 to 102µm wet (more for increased resistance)
Spreading rate at 35µm DFT	Brush approx 9.3m per litre Spray approx 6.8m per litre



APPLICATION INFORMATION

Application conditions	Surface Temperature between 10 - 35°C Relative Humidity between 10 - 85 %
Mixing Ratio	4 parts Base to 1 part Curing Agent by volume Approx 84 base to 16 Curing Agent by mass
Thinner	Dulux Trade Hd Thinner
Induction Period	30 minutes at 25°C (i.e. do not paint immediately after mixing)
Pot Life to gelation	Approx 8 hours at 25°C
Dry to handle	24 hours at 25°C
Recoating Time	6 hours minimum; up to 7 days maximum at 25°C
Cleaning of equipment	For clean up use Dulux Trade Hd Thinner
Substrates	Suitable for cement plaster, concrete and ferrous surfaces
Precautions	Ensure that surfaces are sound and free from dust, dirt, grease and oil. Surfaces must be thoroughly dry - no more than 12% moisture content. Do not apply during cold (below 10°C) or wet weather.

High gloss epoxy enamel for interior industrial and home use (e.g. garage floors, etc.)





APPLICATION INFORMATION

Precautions

Do not apply directly to bare metal surfaces.

Recommended for interior surfaces only.

Cure is slow at low temperatures; below 15°C it takes some days to reach handling and recoating hardness.

The pot life is short above 35°C; shield pressure pots and fluid lines from direct sun.

Equipment and brushes must be cleaned immediately.

Heat resistant to ± 120°C (continuous) although some yellowing occurs above 100°C.

The film will chalk on exterior exposure.

Not suitable for direct application to powdery or friable surfaces whether previously painted or not.

Application

Airless Spray: Ready for use after induction period of 30 minutes.

Air Spray: After mixing, thin 10% by volume and allow 30 minutes induction.

Brush: Can be used on small areas where joining is not a problem e.g. signs, pipes, colour bands, etc.

Roller: Short nap roller may be used on tanks and silos taking precautions to pick up the wet edge to avoid 'window-paning'.

Undercoat: The product can only be over coated with itself. If an undercoat is required, **Dulux Trade Hichem Enamel** thinned 10% by volume can be utilised. **N.B.** Mix the paint first, then stir in the thinners.

Coats Required

Apply two to three finishing coats to new surfaces to achieve a closed film and solid colour.



SURFACE PREPARATION

NEW SURFACES

Cement Plaster and Concrete

Freshly rendered concrete should have dried/cured for a minimum of 6 weeks, the moisture content of the concrete should be below 12% before any preparation and painting is attempted.

It is recommended that fresh plaster should be allowed 1 week drying for every 5mm thickness; and longer in cold or damp weather.

Ensure the entire surface is sound and clean. Remove any plaster spills, and all loose debris from the surface, ensuring an even and clean surface.

Acid etch the surface with a solution of hydrochloric acid to remove laitance, uncured cement, etc. as follows: On steel or power floated concrete (very smooth), use one volume hydrochloric acid to two volumes water. More than one application may be necessary to achieve a paintable surface.

On wood floated concrete (rough), use one volume hydrochloric acid to four volumes water. **N.B.** Hydrochloric acid is corrosive - please wear protective clothing, gloves, masks and eye goggles against splashes.

Allow the acid solution to react for 15 minutes and then wash away all acid with copious amounts of clean water.

Remove excess water and allow thorough drying – no more than 12% moisture content.

Dulux TRADE

Floors - non-skid pedestrian areas (walkways and passages)

Follow the cleaning and etching instructions above. Apply **Coat 1**, and, while it is still wet, sprinkle dry, washed river sand over the surface.

The sand should be sifted through a 250-micron aperture sieve and retained on a 210-micron aperture sieve. A practical spreading rate is 500 grams of sand per square meter of painted floor.

The following day, sweep off any excess sand before applying **Coat 2** to seal the surface.

Allow overnight drying.

Apply **Coat 3**, unthinned, allowing overnight drying between coats.

Observe chemical curing time as above.

Ferrous Surfaces

Remove all shop-primer and corrosion products from the steel. Sand blast steel to achieve a bright metal condition, and a cleanliness standard of Sa2_ minimum.

Clean bare steel with a solvent wash (rags dipped in lacquer thinner). Change rags frequently.

Prime with one or two coats **Dulux Trade Corrocote 2 Metal Etch Primer**, depending on the severity of the conditions (e.g. apply two coats at the coast).

PREVIOUSLY PAINTED SURFACES

The existing coating system should be dry and free of contaminants such as oil, grease and loose paint.

Test that the surface will accept epoxy by allowing a cloth soaked with **Dulux Trade Hd Thinners** to rest on it for 15 minutes - it must not lift or wrinkle.

If lifting or wrinkling occurs, the paint must be removed with **Fixit Double Strength Paint Remover**.

Abrade damaged or failed areas back to a sound surface.

Aged or weathered epoxies or urethanes must be well sanded to provide a profile for adhesion.



HEALTH AND SAFETY INFORMATION

For detailed safety information refer to Material Safety Data Sheet.

Keep out of reach of children.

Store away from direct sun, heat and severe cold, and avoid naked flames or sparks.

Ensure good ventilation during application and drying.

Flash Point 37°C.



ADDITIONAL INFORMATION

Storage Conditions

Store under cool dry conditions.