

TUFFCOTE WATER BASED EPOXY ENAMEL



PRODUCT USES

- Does not contain any solvents (zero VOC).
- Chemical resistant finish coat on steel and concrete surfaces in chemical plants, mines and oil refineries.
- Clean sand or glass beads can be stirred into freshly mixed paint to give a non-slip finish on floors.



FEATURES AND BENEFITS

- Environmentally friendly, water based, and equipment is cleaned with water.
- Almost odourless during application and curing.
- The substrate can be damp – concrete need not be fully cured before application.
- Non-specialist application – can be applied by the average “do-it-yourselfer”.
- Resistant to fresh and salt water, oils and chemicals when fully cured – withstands continuous immersion up to 60°C.
- Withstands nuclear radiation and is easily decontaminated.
- Completely free of Mesityl Oxide, and is therefore approved for use in breweries.
- The cured film is non-toxic (contains no lead or other toxic chemicals).
- 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.
- Once fully cured (after 4 days), the product can withstand cold temperatures as low as -40°C.



PRODUCT INFORMATION

Appearance	Gloss
Colour	Dairy White and Light Grey
Density at 23°C	Approx. : 1.28 kg/L
Solids Content	By weight : Approx. 56% By volume : Approx. 43%
Packaged Viscosity	Viscosity at 23°C : Approx 80 KU
Recommended film thickness	100µm dry; 115µm wet (more for increased resistance)
Recommended DFT per coat	Brush approx 9.3m ² per litre Spray approx 6.8m ² per litre
VOC Level	Max 8g/L - complies with Green Building Council SA



APPLICATION INFORMATION

Mixing Ratio	70 parts Base to 30 part Curing Agent by volume Approx 55 base to 45 Curing Agent by mass
Pot Life to gelation	Use within 1 hour of mixing
Thinner	Potable water
Dry to handle	8 hours at 25°C
Recoating Time at 25°C	24 hours minimum; up to 7 days maximum

A waterbased epoxy enamel for interior use in food and pharmaceutical industries as well as for maintenance in other confined areas





APPLICATION INFORMATION

Cleaning of equipment

For clean up use potable water.

Substrates

Suitable for cement plaster, concrete and metal 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.

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.

High temperatures will shorten pot life and drying times, while low temperatures and high relative humidity will lengthen drying time. The relative humidity must be below 90% during application.

Equipment and brushes must be cleaned immediately with tap water.

Only suitable for interior use - the film tends to yellow and chalk on exterior exposure.

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

Application

Tuffcote is packaged in two components in the proper proportions which must be mixed together before use.

Stir the upper container thoroughly, then add to the Curing Agent in the lower container and mix until uniform.

Do not mix more material than will be used within 1 hour.

N.B. The end of the pot life will not be shown by a viscosity increase (gelation). Material must be used within 1 hour.

Airless Spray: Apply direct as supplied, using a 0,533 mm or larger tip. If necessary, thin up to 15%.

Brush: Ready for use when mixed.

Thin 5% by volume with tap water on hot days.

Roller: Ready for use when mixed. Lambwool or mohair types are preferred.

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, 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.

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.

Galvanised Iron

Clean and degrease with **Dulux Cleaner for Galvanised Iron**. A water-break free surface indicates thorough cleaning - running water should not form droplets.

Prime with one or two coats **Dulux Trade Corrocote 3 Metal Primer** depending on the severity of the conditions (e.g. apply two coats at the coast).

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 sound, dry and free of contaminants such as oil, grease and loose paint.

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.

Non-flammable.



ADDITIONAL INFORMATION

Storage Conditions

Store under cool dry conditions.