

Strongcoat EC50

High build solvent based epoxy resin coating



DESCRIPTION

Strongcoat EC50 is a high build, hard wearing, solvent based, epoxy resin coating, designed to provide a hard, semi-gloss coating to concrete floors, walls, ceilings, steel and other substrates.

APPLICATIONS

Strongcoat EC50 is used as protective, decorative, high chemical resistance and hard wearing coating system for floors or walls in many applications including:

- » Aircraft hangars.
- » Car parks.
- » Soft drink and beverage production areas.
- » Dairies production areas.
- » Show rooms.
- » Production, maintenance and assembly areas.
- » Warehouses.
- » General food processing and manufacturing plants.

ADVANTAGES

- » Can be used on concrete, steel, galvanized steel substrates.
- » High chemical and mechanical resistance.
- » Available in a wide range of attractive colours.
- » Cost effective.
- » Easy application.

METHOD OF USE

SUBSTRATE PREPARATION

The substrate must be clean, dry, even, dense and free from oil, grease, dust and other contaminants. A clean surface will ensure maximum adhesion between the substrate and the coating.

Concrete floors must have a minimum compressive strength of 25 N/mm² and a maximum concrete relative humidity of 80% (max. moisture content of 4%), relative humidity can be measured using a hygrometer. Concrete relative humidity should be less than 80% for concrete 28 days old or more.

SURFACE PREPARATION

Unsound layers and contaminated concrete surfaces must be prepared using mechanical surface removing equipment.

Acid etching can be used only in well ventilated areas. Areas deeply contaminated by oil or grease, such areas should be treated by hot compressed air.

TECHNICAL PROPERTIES:

Mixed density:	1.40 g/cm ³ @ 25°C
Pot life:	> 90 min @ 25°C > 45 min @ 35°C
Minimum time between coats:	12 hr @ 25°C 6 hr @ 35°C
Maximum time between coats:	24 hr @ 25°C 12 hr @ 35°C
Dry film thickness:	150 microns/coat
Initial curing:	24 hr @ 25°C 12 hr @ 35°C
Full curing:	10 days @ 25°C 7 days @ 35°C
Bond strength: ASTM D4541-95	> 2 MPa (concrete failure)
Water absorption: ASTM D570	< 0.6%
Taber abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss CS17 wheel	100 milligram

MIXING

To avoid inconsistent workability and pot life, make sure that the materials to be used are stored in shaded area and protected from extremes of temperatures, for at least 24 hours prior to application.

Prior to mixing, stir individual components of the Base and Hardener. Add the entire content of the Hardener container to the Base and mix thoroughly for at least 3 minutes.

Note: In certain cases the Base of the product can be supplied uncoloured and needs the addition of a colour pack. In such cases, mix the components of the colour pack and Base for 2 minutes, then add the entire content of the Hardener to the mixture and mix thoroughly for 3 minutes.

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COATING

Use brush or lambs wool roller, or airless spray machine to apply the mixed Strongcoat EC50 onto the prepared surfaces. Apply 2 coats of Strongcoat EC50 at 2.9 m²/kg/coat, second coat should be applied at a right angle to the first coat.

The second coat may be applied as soon as the first coat has initially dried. Drying time will depend on the substrate and the ambient conditions. If the over coating time is exceeded the first coat must be abraded with sand paper prior to the application of the second coat. Adequate ventilation must be provided to ensure that necessary drying and curing of the material is achieved.

REMARKS

- » Strongcoat EC50 should not be applied at temperatures below 10°C or where ambient relative humidity exceeds 85%.
- » Strongcoat EC50 should not be applied onto surfaces known to suffer from rising damp.
- » In case of spray applications, airless spray machines should be used.

CLEANING

Tools and equipment can be cleaned with DCP Solvent. Dried Strongcoat EC50 may be removed mechanically.

PACKAGING

Strongcoat EC50 is available in 5 kg packs (3.6 litre) and 20 kg packs (14.3 litre).

COVERAGE

The coverage rate is 2.9 m²/kg/coat to achieve dry film thickness of 150 microns/coat.

STORAGE

Store in a dry area out of direct sunlight at temperatures between 15°C and 30°C.

SHELF LIFE

Strongcoat EC50 has a shelf life of 18 months from date of manufacture if stored in proper conditions and unopened packs.

If these conditions are exceeded, DCP Technical Department should be contacted for advise.

OCCASSIONAL SPILLAGE

Chemical Resistance after full cure (7 days @ 25°C), ASTM D1308 (spot test @ 1 hr)

Organic Acids

Lactic Acid 10%	R
Oleic Acid sat.	R
Citric Acid 25%	R
Vinegar 10%	R

Inorganic Bases

Sodium Hydroxide 50%	R
Ammonia Solution 10%	R
Potassium Hydroxide 50%	R

Aqueous Solutions

Sodium Chloride sat	R
Tap Water	R
Chlorinated Water	R
Dead Sea Water	R

Solvents

White Spirit	R
Xylene	R
Toluene	R
Acetone	R

Oils & Fuels

Benzyl Alcohol	R
Brake Fluid	RS
Engine Oil	R
Diesel	R
Kerosene	R
Detergents & Soaps	R

Inorganic Acids

Sulphuric Acid 25%	R
Phosphoric Acid 20%	RS
Hydrochloric Acid 10%	R
Nitric Acid 10%	R

R: Resistant

RS: Resistant with slight discoloration

SS: Slight softening

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CAUTIONS

HEALTH AND SAFETY

Strongcoat EC50 should not come in contact with skin and eyes.

In case of accidental splashes to the eyes, rinse thoroughly with clean water and seek medical advice. Suitable protective gloves and goggles should be worn. Do not use solvent to clean Strongcoat EC50 from skin.

For further information refer to the Material Safety Data Sheet.

FIRE

Strongcoat EC50 and DCP Solvent are flammable. Ensure adequate ventilation. Do not use near a naked flame and do not smoke during use.

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A wide range of construction chemical products are manufactured by DCP which include:

- » Concrete admixtures.
- » Surface treatments
- » Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.



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Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.

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DCP Building Excellence

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