



The Chemical Company

MASTERTOP[®] 1050

Chemical resistant coloured epoxy coating

DESCRIPTION

Mastertop 1050 is a high-build epoxy resin based coating which is designed to protect concrete, masonry and metal surfaces from chemical attack and corrosion. It is supplied as a solventless, three component system consisting of resin, hardener and colour pack.

RECOMMENDED FOR

- Concrete floors, walls, drains, pipe work, storage tanks, equipment to provide protection against chemical attack and corrosion.
- Waterproofing of concrete and masonry surfaces, above or below grade.
- Use in the following industries: food and beverage, oil, chemical and fertiliser processing, marine, mining, sewerage treatment plants, printing and paper manufacturing, engineering and automotive servicing.
- In areas where hygiene and health requirements are important such as commercial kitchens, catering facilities, hospitals and veterinary surgeries, laboratories.
- For the positive side of walls.

Mastertop 1050 is not recommended for lining of storage vessels for food or beverages; continuous service temperatures above 90°C; application of any coat thicker than 200 microns; application where it may be subjected to thermal shock; application to surfaces which will be subjected to a combination of extreme wear and aggressive chemicals, (for these conditions refer to BASF Construction Chemicals); application where surface temperature cannot be maintained above 15°C for 4 days.

FEATURES AND BENEFITS

- *Exceptionally long pot life*
- *Excellent chemical resistance - maximum surface protection against attack from mineral and food acids, fats, fuels and strong alkali and salt solutions*
- *High bond strength - tenacious adhesion to correctly prepared surfaces*
- *Resists abrasion - durable surface which because of its high build properties provides resistance to traffic and abrasion*
- *Hygienic - provides a floor surface which resists bacterial growth*
- *Waterproof - impervious to penetration by water.*
- *Solvent free*
- *Easy to clean and maintain*
- *High gloss*

TYPICAL PERFORMANCE DATA

Physical

Film Thickness - 200 microns per coat dependent on substrate type, porosity, profile.

Abrasion Resistance ASTM C779 Procedure A - 30 minutes - 0.09mm.

Chemical resistance

Mastertop 1050 resists most hydraulic and lubricating oils, common organic solvents and alkalis including strong caustic soda solutions. Mastertop 1050 has limited resistance to acetic and lactic acids, oxidising mineral acids, methylene chloride, ketonic solvents, phenol solutions and wet chlorine. Chemical resistance depends on the chemicals involved, their concentration, temperature and degree of exposure.

Good housekeeping practices such as immediate clean up of all spillage will greatly extend the working life of the product.

Supply form	Liquid
Colour	Full range available Colour Pack X1
Mix full kits only	
Density (mixed unit)	
With colour pack	1.34/kg per litre
Application temperature	min. +°C

APPLICATION

Surface preparation

To obtain maximum performance:

- 1) Concrete should be well cured, at least 28 days old and have a minimum compressive strength of 25MPa.
- 2) Clean surface thoroughly to remove all contaminants such as dirt, oil, grease, wax, rust and coatings.
- 3) Remove laitance and roughen surface to ensure good bonding by chipping, scabbling, grit blasting or acid etching. Allow to dry thoroughly.

Surface imperfections may be filled using Concrete 1442.

Mixing

Stir Part A and add X1 colour pack, mix until uniform, add Part B and blend for 3 minutes with a slow speed mixer fitted with a suitable paddle (600 RPM).

Method of use

Apply by stiff brush, short-nap roller, squeegee or airless spray gun. Spray equipment is commercially available for larger jobs that automatically meters, mixes and applies two component systems at various material temperatures.

To avoid pinholing and imperfections, apply two or more

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coats, rather than one thick coat. The second coat may be applied as soon as the first is touch dry. To ensure proper adhesion between coats, the intercoat time should be, 12 hours minimum and 36 hours maximum at 23°C.

Non slip finish

Apply Mastertop F1 or F5 aggregates immediately after first coat, while it is still wet. Then apply the second coat in the normal way. Apply **Mastertop F1** filler or silicon carbide chips. Note: Non slip finish reduces coverage rate of material.

CURING

Curing time will vary depending on quantity mixed and placed and temperature. Mastertop 1050 will be touch dry in 4 to 6 hours at 23°C. It can take light traffic after 2 days and will be fully cured with maximum chemical resistance in 7 days at 23°C. Cure may be hastened by sustained gentle heating (to a maximum of 90°C).

POT LIFE

Pot life will vary depending on quantity mixed, and ambient temperature. **Mastertop 1050** has a pot life of approximately 2 hours at 23°C (mixed components in pail).

CLEANING

Use Thinner No. 1 to clean equipment and tools before the material hardens.

ESTIMATING DATA

On completely smooth, non-absorbent surfaces, one litre of **Mastertop 1050** will provide a wet film build of 200 microns over 5m². Heavier applications and porous surfaces will reduce this coverage.

PACKAGING

Mastertop 1050 is a three component system which, when mixed according to directions, yields 5 litres:

Comprising	Part A	3.15L
	Part B	1.55 L
	X1 Colourpack	0.3L

NOTE : Where light colours, (yellow/white etc.) are required, the addition of 2x1 colour packs are advised to ensure opacity. A third coat or primer is also recommended.

SHELF LIFE

Mastertop 1050 can be stored under cover in tightly closed original container for 24 months at moderate temperatures.

PRECAUTIONS

READ ALL SAFETY DIRECTIONS AND WARNINGS ON TINS BEFORE USE. REFER TO MATERIAL SAFETY DATA SHEET FOR HANDLING PROCEDURES.

- 1) As with all epoxy products, wear protective overalls and gloves - prolonged contact with skin should be avoided as it could produce dermatitis, particularly with people whose skin may be sensitive to epoxy resin systems.
- 2) Ensure adequate ventilation.
- 3) Mix entire contents of each unit as supplied. Do not attempt to split units unless accurate measuring can be assured.
- 4) Do not use at temperatures of less than 15°C unless artificial means of heating can be used to assist cure. During cold weather Part A should be pre-warmed to between 20°C and 30°C.
- 5) In winter, let mixed product stand for 15 minutes before use and consider use of heat curing to ensure full cure is achieved. Do not allow contact with water until fully cured. These actions prevent whitening of surface at a later date

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this **BASF Construction Chemicals** publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's 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 law. The user is responsible for checking the suitability of products for their intended use.

NOTE

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