

MASTERTOP® 1245

Epoxy based high strength mortar flooring system

DESCRIPTION

MASTERTOP 1245 is a solvent free, high performance, versatile epoxy binder that can be used as a binder to produce a range of epoxy resin based mortars for flooring. **MASTERTOP 1245** can be applied to both dry and damp surfaces and adheres to most substrates after proper preparation.

RECOMMENDED FOR

- Structural bonding of new to old concrete
- Production of epoxy resin mortars for floor toppings
- Priming of concrete floors prior to applying MASTERTOP Flooring System
- Food production facilities
- Warehouses and workshops
- Manufacturing facilities

FEATURES AND BENEFITS

- **Excellent adhesion**
- **Adheres to wet or damp surfaces**
- **Solvent free**
- **Low viscosity**
- **High abrasion resistance**
- **Excellent chemical resistance**
- **Non shrink**
- **Bleed free mortars**
- **Use MASTERTOP X1 Colour for tinting**

TYPICAL PERFORMANCE DATA

Binder only at 23°C

Compressive Strength 7 days	88MPa
Flexural Strength 7 days	42MPa
Tensile Strength 7 days	52MPa
Compressive Strength 24 hours	42MPa
Heat deflection temperature	80°C
Compressive Modulus	3.4 GPa
Bond Strength (concrete failure)	>2.5 MPa

Mortar Performance Ultimate @23°C

Skim coat F1 Filler	
Compressive strength	80MPa
Tensile strength	48MPa
Flowable Mortar	
Compressive strength	75MPa
Tensile strength	40MPa
Mortar	
Compressive strength	60MPa
Tensile strength	32MPa

Chemical Resistance

MASTERTOP 1245 resists most common organic and inorganic acids in diluted form, also resistant to alkalis, water, oils, grease, etc. Chemical resistance depends on the chemicals involved, their concentration, temperature and degree of exposure. Good housekeeping practices such as immediate clean up of all spillages will greatly extend the service life.

PROPERTIES

	Part A	Part B	Mixed
Supply form	Liquid	Liquid	Liquid
Appearance	Clear	Clear	Clear
Mix Ratio			3:1 pbv
Density (Mixed)			1.1kg/L
Application Temperature			Min.5°C Max.35°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, for maximum absorption and adhesion.
- 4) Shot or track-blast to expose firmly held substrate.

Mixing

Proportion part kits accurately, mixing only what can be used in less than 30 minutes. Thoroughly stir Part A, add Part B and blend thoroughly using a slow speed mixer fitted with a suitable paddle.

Only clean, kiln dried sand may be mixed in. The maximum aggregate size should approximate to 1/3 of the maximum required depth.

The following mix ratios are given as a guide. Consideration should be given to the volume of mortar and potential problems associated with exotherm.

Binder (MASTERTOP 1245 parts A & B mixed):

MASTERTOP Filler F1 ratio by volume

- 1 : 1.5 Fluid skim coat
- 1 : 2.8 Flowable mortar
- 1 : 4 Mortar ("dry" mortar)



The Chemical Company

MASTERTOP® 1245

MASTERTOP 1245 mortar may be placed using standard trowelling techniques on to the surface. Where gauging to line and level for a skim coat, scrape material on and off the surface, leaving undulations and holes filled with resin mortar. Non skid textures can be achieved by a sprinkle of MASTERTOP F1 or MASTERTOP F5 Filler into wet film.

Overcoat with MASTERTOP 1080 or MASTERTOP 1050 as required.

Note: The surface will have to be primed with MASTERTOP 1245 when using "dry" mortars. Use MASTERTOP 1245 Binder only to prime. When aggregate ratio is over 1:3, resin to aggregate apply MASTERTOP 1245 mortar wet on wet, or within 24 hours on cured primer. Should MASTERTOP 1245 cure when priming, seed with MASTERTOP F1 or MASTERTOP F5 Filler. When bonding wet to dry concrete or cementitious mortars do not allow MASTERTOP 1245 to become tack free and be diligent on maintaining coverage. Tack free time on a 4m²/litre coating is 75 minutes to 105 minutes at 23°C. Mix and apply quickly to achieve longer tack free period.

CURING

Time will vary depending on the ambient temperature, quantity mixed and placed, and the rate of sand addition. MASTERTOP 1245 will have fully cured after 7 days at 23°C.

POT LIFE

Pot life will vary depending on the ambient temperature, quantity mixed and placed, and the filler content. Two litres of mixed MASTERTOP 1245 binder will have a pot life of about 30 minutes at 23°C.

ESTIMATING DATA

Binder : MASTERTOP F1 ratio by volume

1 : 1 Yield = 0.75 total ratio

1 : 2.8 Yield = Filler Volume (2.8 litres)

1 : 4 Yield = Filler Volume (4 litres)

Priming coverage 4-6m²/litre.

Wet to dry bonding concrete – approximately 4m²/litre depending on profile of concrete.

CLEANING

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

PACKAGING

MASTERTOP 1245 is available in 80L kit size.

SHELF LIFE

MASTERTOP 1245 can be stored in it's tightly closed original containers for 24 months at moderate temperature.

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 system.
- 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 5°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.

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the BASF Construction Chemicals **Material Safety Data Sheet (MSDS)** of the individual products from our office or our website.

AMt1245/6/1011

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this BASF 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

Field service where provided does not constitute supervisory responsibility. Suggestions made by BASF either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not BASF, are responsible for carrying out procedures appropriate to a specific application.

BASF Australia Ltd
A.B.N. 62008437867
Head Office: 11 Stanton Road Seven Hills, NSW 2147
Ph. (02) 8811 4200

Newcastle	(02) 4961 3819
Canberra	(02) 6280 6010
Brisbane	(07) 3633 9900
Townsville	(07) 4774 7344
Melbourne	(03) 9549 0300

Adelaide	(08) 8139 7500
Perth	(08) 9366 2600
Darwin	(08) 8984 3269
Kalgoorlie	0417 772 355

BASF New Zealand Ltd
BASF WEB SITES

Head Office: 45 William Pickering Drive, Albany, Auckland Ph: (09) 414 7233
www.basf-cc.com.au www.basf-cc.co.nz www.meyco.basf.com