

# MasterProtect® 1810

## Phenol Novolac Epoxy Amine Cured Filler

### DESCRIPTION

**MasterProtect 1810** is a fast setting, repair compound, ideal for minor concrete repair applications such as pin holes, blow holes & fine surface cracks.

**MasterProtect 1810** is easily worked and can be applied by trowel, spatula or scraper. It cures to give high chemical & mechanical properties typical of Novolac systems. It is resistant to oils, greases, petroleum, salts, many acids and alkalis and most commonly met corrosive media. It does not shrink on curing, and is designed to be used when cured from below freezing point to 60°C. Its impact resistance, and mechanical strength is greater than that of concrete.

### TYPICAL APPLICATION

- Fine filling resin for use in **MasterProtect 1800** series Novolac epoxy systems.
- Repairing surface defects such as blowholes and pin holes in concrete substrates.
- Dowel bars anchoring.

### CHEMICAL RESISTANCE

**MasterProtect 1810** has excellent resistance to the following: Most aqueous systems, sewage, urine, fresh water, sea water, diluted and concentrated alkalis, diluted acids, sulphur gases, mineral, vegetable and solvents and etc.

### FEATURES AND BENEFITS

- High strength.
- Strong adhesion.
- Impact resistant
- Chemical resistant.
- Non shrink.
- Fast setting.
- Trowels to a smooth finish.
- Easy to use.

### COLOUR

Cement Grey

### PACKAGING

**MasterProtect 1810** is available in 1 litre (1.475 kg) units.

### TYPICAL PROPERTIES

|   |                                  |
|---|----------------------------------|
| Volume Solids                                   | 98%                              |
| VOC   | 15.65 g/L                        |
| Mixed density at 25°C                           | 1.47g/cm <sup>3</sup> (approx.)  |
| Pot life  |                                  |
| • 25°C  | 20 minutes                       |
| • 40°C  | 9 minutes                        |
| Recoat Interval                                 |                                  |
| • 25°C  | 60 – 210 minutes                 |
| • 40°C  | 30 – 50 minutes                  |
| Initial cure                                    | 24 hours @ 25°C                  |
| Final cure                                      | 7 days @ 25°C                    |
| Bond to concrete:                               | >1.5 MPa                         |
| Compressive strength to ASTM C579 at 25°C       | ≥ 60 N/mm <sup>2</sup> at 7 days |
| Abrasion resistance ASTM D4060 (CS17) at 7 days | 70 mg                            |

### APPLICATION PROCEDURE

#### PREPARATION:

Surfaces must be clean and dry. Use suitable methods to remove dirt, dust, oil and all other forms of contamination that could interfere with the adhesion of the primer.

#### CONCRETE

Concrete must be cured for 28 days. Mechanically surface profiling is the method of surface preparation. Mechanically profile the surface to CSP3 as described by the International Concrete Repair Institute. Voids and pinholes must be repaired.

Generally it is preferred to prime the concrete with **MasterProtect 1801** before any scrape coat applications.

#### MIXING

The 1litre (1.475kg) pack has been designed to be readily mixed by margin trowel at the ratio of 4.2 parts base to 1 part hardener. Mix the material for 1 minute and until it is free of streaks.

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## APPLICATION:

Scrape or trowel **MasterProtect 1810** to the required level. **MasterProtect 1810** has a high exotherm and so where deep recesses are to be filled, it may be necessary to use **MasterProtect 1840**.

## WORKING TEMPERATURE:

**MasterProtect 1810** will cure at temperatures as low as 0°C, although at low temperatures full cure takes longer than 7 days.

## COVERAGE

1 litre (1.475kg) is sufficient to cover 1m<sup>2</sup> at 1mm thickness.

## EQUIPMENT CARE

Clean with acetone immediately after use.

## SAFETY PRECAUTIONS

As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use. Do not leave mixed quantities beyond 300grams or 200ml to sit for prolonged time or exposed to high temperatures as this can cause exothermic reaction to occur and excessive smoking. If smoking of the product should occur, quickly fill it with sand and remove it to a well ventilated area. Do not breathe in the smoke. Reseal containers after use. For further information, refer to material safety data sheet.

## STORAGE

Store under cover out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air conditioned environment.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF's Technical Services Department.

## NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF representative.

BASF reserves the right to have the true cause of any difficulty determined by accepted test methods.

## QUALITY AND CARE

All BASF Products are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health and safety standards of ISO 9001 and BASF ESHQ recommendations.

\* Properties listed are based on laboratory controlled tests.

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