



The Chemical Company

# MASTERSEAL<sup>®</sup> BC 1820

## Phenol Novolac Epoxy Amine Cured High Build Coating

### Description

Non-toxic highly cross-linked 100% solids epoxy coating with exceptional chemical resistance. Widely used as a coating, anti-slip system or as a GRP / FRP lining system to protect concrete & steel in the sewage and waste water treatment and petrochemical industry.

### Typical applications

MASTERSEAL<sup>®</sup> BC1820 is used for the internal protection of concrete or metal tanks containing aggressive chemicals, oils, acids, solvents and alkalis.

### Chemical resistance

MASTERSEAL<sup>®</sup> BC1820 is resistant to intermittent spillages of the following typically encountered chemicals:

- Sulfuric Acid - 98%
- Concentrated Hydrochloric Acid
- Concentrated Phosphoric Acid
- Sodium Hydroxide – 50% solution
- Nitric Acid 10%
- Ethanol 96%
- Ethylene Glycol
- Chlorine water – 1000ppm
- Crude Oil
- Sodium Chloride – 50% solution
- Potassium Hydroxide – 50% solution

### Features & Benefits

- High gloss ultra dense finish
- Excellent resistance to acids, caustics, and hydrocarbons
- Excellent abrasion resistance
- Can be reinforced where exposure conditions dictate
- Cured coating is non-toxic

### Limitations

- Do not use in water immersion over 60°C
- A loss of gloss and discoloration may be observed above 90°C dry heat.
- Epoxies lose gloss, discolor and will chalk in direct sunlight exposure.
- Immersion temperature resistance is dependant upon exposure.

### Colours

Red, Grey, Black, White, Brown and Yellow

### Typical properties

Volume Solids	100%
VOC	Nil
Mixed density at 25°C :	1.173g/cm <sup>3</sup>
Pot life	
• 25°C	13 minutes
• 40°C	7 minutes
Recoat Interval	
• 25°C	60 – 180 minutes
• 40°C	35 – 80 minutes
Initial cure	24 hours @ 25°C
Final cure	7 days @ 25°C
Bond to concrete:	>1.5 MPa
Abrasion Resistance ASTM D4060 CS17	70mg/1000 cycles

### Packaging

MASTERSEAL<sup>®</sup> BC1820 is supplied in 4 litre (4.69kg) units.

### Application

#### 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 coating.



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## 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.

## Steel

Prepare to SSPC-SP6. Surface profile 50-75 micron. Test reports & additional documentation are available upon request.

## Primer

Masterseal P1801

## Theoretical Coverage

One 4 litres unit will cover 4m<sup>2</sup> at 1mm wet film thickness. Please refer to the method statements for the MASTERSEAL<sup>®</sup> 1800 series build ups.

## Application

MASTERSEAL<sup>®</sup> BC1820 may be applied by brush or roller. Please refer to our latest Method Statement for detailed application instructions.

## Storage

Up to 12 months when stored under cover, out of direct sunlight and protected from extremes of temperature.

## Watchpoint

No additions or omissions are required and on no account should attempts be made to split packs.

## Health and safety

### Cleanup

Use Acetone in case of spillage, absorb and dispose of in accordance with local applicable regulations.

### Safety

Read and follow all caution statements and on the MSDS for this product. Employ good workmanlike safety precautions. Wear protective clothing, gloves and eye protection. Mixed material should be sprayed or poured out into trays and brushed or rolled before the pot-life of the material. 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.

### Ventilation

When used as a tank lining or in enclosed areas through air circulation must be used during and after application until the application is cured. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel. Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.



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## 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.

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\* Properties listed are based on laboratory controlled tests.

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Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

**As all BASF technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.**

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