

# MasterProtect 320

## Single Component Protective and Decorative Anti- Carbonation Coating for Concrete and Masonry

### DESCRIPTION

MasterProtect 320 is a single component, water based coating formulated from a blend of high performance polymer emulsion with pigments, fine fillers and biocide.

The coating provides a protective and decorative finish for exterior and interior use on concrete and other substrates. It is formulated to give a tough, durable film with excellent adhesion to concrete and resistance to weathering and industrial pollution.

### FIELDS OF APPLICATION

- As an integral final treatment in the repair and protection of reinforced concrete
- Aesthetically pleasing, smooth matt finish to refurbished and new buildings
- Provides anti-carbonation properties and also protection against damage by water borne salts such as chlorides
- As a final cosmetic uniform finish

### FEATURES AND BENEFITS

- Fast drying –reduced overcoat times
- Easy to use, apply by brush, roller or spray
- Water based, non-flammable and low odour
- Excellent protection against condensation, weather and atmospheric pollution
- Good opacity and colour retention
- Alkali resistant
- Moisture vapour permeable, allows concrete to “breathe”
- For internal and external use, above ground level
- Application equipment can be cleaned with water

### APPLICATION PROCEDURE SUBSTRATE QUALITY

Fresh concrete and masonry should be allowed to cure for at least 28 days before application.

### SUBSTRATE PREPARATION

Substrates to be treated must be completely clean, structurally sound and mechanically keyed. All substrate coatings, defective renders, foreign matter, formwork treatments and other contaminants that may affect the bond adversely should be removed.


Treat any area affected by algae or moss, with a suitable proprietary fungicide, after the surface preparation has been completed.

Substrates containing surface cracks, blowholes and minor irregularities should be re-profiled with a suitable product from the Emaco Nanocrete range.

### MIXING & PRIMING

Stir MasterProtect 320 before use.

Priming is not normally required, however if the substrate is very porous one primer coat should be applied consisting of MasterProtect 320 diluted with up to 10% by volume, clean potable water. Mix the water thoroughly in before application by brush, roller or spray.

 <b>0749</b>	
<b>BASF Belgium Coordination Center Comm. V.          Business Belux - Construction Chemicals          Nijverheidsweg 89, B-3945 Ham</b>	
<b>11          BE0017/01</b>	
<b>EN 1504-2          Decorative, protective anti-carbonation,          acrylic coating</b>	
<b>EN 1504-2 Principles 1.3 / 2.3 / 8.3</b>	
Adhesion strength by pull-off test	≥ 0,8 MPa
Carbonation resistance	Sd > 50 m
Water vapour permeability	Class I
Capillary water absorption	w ≤ 0,1 kg/m <sup>2</sup> x h <sup>-0,5</sup>
Adhesion after thermal compatibility	
- Freeze/Thaw with salt	≥ 0,8 MPa
- Thunder/Shower	≥ 0,8 MPa
Artificial weathering	Pass
Fire resistance	F

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### APPLICATION METHOD

#### Application

Do not apply MasterProtect 320 when the ambient temperature or the substrate temperature is below 9°C and will drop below 5°C within 24 hours.

In order to avoid condensation, the surface temperature during application should be 3°C higher than the dew point.

The surface should be air-dry. At temperatures above 35°C dampen the surface prior to the application.

Apply MasterProtect 320 with a brush, roller, airless or conventional spraying equipment. For a uniform appearance, finish in the same pattern.

### FINISHING AND CLEANING

Immediately after use clean application equipment thoroughly with water. Dry spillages can be removed using xylene.

### CURING

Allow the first coat to completely dry, before applying the second coat. The drying time depends upon climatic conditions. Allow a minimum of 4 hours between coats at 20°C (<70% RH).

### PACKAGING

MasterProtect 320 is supplied 15 litre plastic pails.

### COVERAGE

Priming (if required): 1 coat of diluted MasterProtect 320 applied at 5-6 m<sup>2</sup>/litre.

Topcoat: 2 coats of MasterProtect 320 applied at a combined rate of 0.3 to 0.6 l/m<sup>2</sup> (nominal consumption 0.4l/m<sup>2</sup>).

15 litres will cover between 25 -50m<sup>2</sup> in 2 coats.

Consumption is dependent on substrate porosity and profile. We recommended that a trial area is treated to determine coverage rates.

### STORAGE

MasterProtect 320 should be stored under cover, clear of the ground and stacked not more than 2 pails high. Protect the materials from all sources of moisture, direct sunlight and frost.

### SHELF LIFE

MasterProtect 320 has a shelf life of 12 months when stored in undamaged, unopened containers.

### HANDLING AND TRANSPORT

Usual preventive measures for the handling of chemical products should be observed when using this product, for example do not eat, smoke or drink while working and wash hands when taking a break or when the job is completed.

Specific safety information referring the handling and transport of this product can be found in the Material Safety Data Sheet. For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

Disposal of product and its container should be carried out according to the local legislation in force. Responsibility for this lies with the final owner of the product.

### CONTACT DETAILS

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Product Data		
Property	Unit	Data
Density	kg/l	1.4 – 1.5
Solids by Volume	-	46% ± 1%
Vapour permeability- $\mu\text{H } 2\text{O}$	-	850 - 900
CO <sub>2</sub> permeability - $\mu\text{CO}_2$	-	1150000
Colours – 4 Standard colours  A range of other colours to NCS and BS standards are available upon request .Contact your local Master Builders Solutions UK Ltd Technical Department or our sales office.		White      No NCS number Ivory      NCS S 0804 - Y10R Cream      NCS S 0510 - Y20R Light Grey      NCS S 1502 - Y

(a) Typical values – all tests have been performed under temperature controlled conditions of 21°C.

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### Health and Safety

\*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

### Solvent Based Products

Use in well ventilated areas; avoid inhaling. Suitable respiratory equipment may be needed, eg when spraying. Can cause skin, eye irritation. Wear protective eye shields and gloves during use. Do not smoke or allow sparks or naked lights when stored or in use.

### Resin Products

Can cause irritation, dermatitis or allergic reaction. Use protective equipment particularly for skin and eyes. Use only in well ventilated areas.

### Spillage

Chemical products can cause damage; clean spillage immediately.

### DISCLAIMER

"Master Builders Solutions UK Ltd" (the Company) endeavours to ensure that advice and information given in Product Data Sheets, Method Statements and Material Safety Data Sheets (all known as Product Literature) is accurate and correct. However, the Company has no control over the selection of its products for particular applications. It is important that any prospective customer, user or specifier, satisfies him/her-self that the product is suitable for the specific application. In this process, due regard should be taken of the nature and composition of the background/base and the ambient conditions both at the time of laying/applying/installing the material and when the completed work is to be brought into use.

Accordingly, no liability will be accepted by the Company for the selection, by others, of a product, which is inappropriate to a particular application.

Products are sold subject to the Company's standard conditions of sale and all customers, users and specifiers, should ensure that they examine the Company's latest Product Literature.