

# MasterProtect<sup>®</sup> 1812

**Amine-cured, pitch free epoxy**

## DESCRIPTION

A solvent-free, highly chemical resistant non-carcinogenic coating. In appearance, **MasterProtect 1812** is smooth and glossy.

## TYPICAL APPLICATIONS

**MasterProtect 1812** is used to provide a heavy duty protective, waterproof, and flexible coating. Widely used in the sewerage & waste water industry as well as other aggressive immersion conditions on cementitious & metal substrates. Uses include the lining of tanks, pipes and ducting, coating concrete, asbestos cement, pipes and nonferrous metals.

**MasterProtect 1812** is particularly suitable for use in sewerage work applications and in offshore or marine environments.

## ADVANTAGES

- Excellent overall chemical resistance
- Excellent abrasion resistance & flexibility
- VOC compliant to EN norms
- High build coating
- Easy application: brush, roller, spray
- Economical
- Non-carcinogenic and non-toxic
- Seamless finish
- Eco-friendly coating
- Excellent corrosion protection
- Available in two colours to differentiate system build-up

## PACKAGING AND COLORS

**MasterProtect 1812** is supplied in 27 kg (18 L) units.

Available in the following standard colours:  
Black, Concrete Grey, Light Grey and White.

## THEORETICAL COVERAGE RATE

### EXPOSURE CONDITIONS

<b>Moderate</b>	<b>Total DFT</b>	<b>200-300 µm</b>
Primer	<b>MasterProtect P 659</b>	150-300 g/m <sup>2</sup>
Skim Coat	<b>MasterBrace ADH 2200</b>	As required
Top Coat	<b>MasterProtect 1812</b>	180-255 g/m <sup>2</sup>
<b>Severe</b>	<b>Total DFT</b>	<b>325-500 µm</b>
Primer	<b>MasterProtect P 659</b>	150-300 g/m <sup>2</sup>
Skim Coat	<b>MasterBrace ADH 2200</b>	As required
Body Coat	<b>MasterProtect 1812</b>	180-255 g/m <sup>2</sup>
Top Coat	<b>MasterProtect 1812</b>	180-255 g/m <sup>2</sup>
<b>Immersion</b>	<b>Total DFT</b>	<b>450-650 µm</b>
Primer	<b>MasterProtect P 659</b>	150-300 g/m <sup>2</sup>
Skim Coat	<b>MasterBrace ADH 2200</b>	As required
Body Coat 1	<b>MasterProtect 1812</b>	180-240 g/m <sup>2</sup>
Body Coat 2	<b>MasterProtect 1812</b>	180-240 g/m <sup>2</sup>
Top Coat	<b>MasterProtect 1812</b>	180-255 g/m <sup>2</sup>
<b>Abrasive</b>	<b>Total DFT</b>	<b>900-1200 µm</b>
Primer	<b>MasterProtect P 659</b>	150-300 g/m <sup>2</sup>
Skim Coat	<b>MasterBrace ADH 2200</b>	As required
Body Coat 1	<b>MasterProtect 1812</b>	250-312 g/m <sup>2</sup>
Body Coat 2	<b>MasterProtect 1812</b>	250-312 g/m <sup>2</sup>
Body Coat 3	<b>MasterProtect 1812</b>	250-312 g/m <sup>2</sup>
Body Coat 4	<b>MasterProtect 1812</b>	250-312 g/m <sup>2</sup>
Top Coat	<b>MasterProtect 1812</b>	180-250 g/m <sup>2</sup>

### VOC VALUES

18.25 g/L

### SOLIDS CONTENT

By Volume: 100%

### DRY TEMPERATURE AND RESISTANCE

160°C

A loss of gloss and discolouration may be observed above 90°C.

### IMMERSION TEMPERATURE RESISTANCE

Immersion temperature resistance is dependant upon exposure. Please consult Master Builders Solutions Technical Service for specific information.

### LIMITATIONS

- Do not use in water immersion over 60°C
- Epoxies lose gloss, discolour and will chalk in direct sunlight exposure.

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## SURFACE AND SUBSTRATE PREPARATIONS

### GENERAL

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.

### CONCRETE

Concrete should be sound and sufficiently dry to accept **MasterProtect 1812**. 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.

## PRIMER

**MasterProtect P 659**

## PLACING / APPLICATION

**MasterProtect 1812** may be applied by airless spray, brush or roller. Please refer to our latest Method Statement for detailed application instructions.

## PERFORMANCE DATA\*

Physical Characteristics		
Appearance	Black resinous thixotrope	
Mixed Density ASTM D1475	approx. 1.5 kg/L	
Tensile Strength at 7 days ASTM D638	23 N/mm <sup>2</sup>	
	Application Temperature	
	25°C	40°C
Pot-life ASTM D2471	75 min	55 min
Tack-free time ASTM C679	4 h	1 h and 40 min
Touch-free time	8 h	4 h
Pull off strength (7 days) ASTM D4541	3 N/mm <sup>2</sup> (concrete failure)	
Dry Heat Aging Test at 160°C continuous for 30 days (300µ) DFT	>1.5 N/mm <sup>2</sup>	
Abrasion Test (CS17 wheel / 1000g / 1000 cycle) at 7 days ASTM D4060	<50 mg	
Depth of water penetration BS EN 12390 Part 8: 2000	Nil	

Test reports & additional documentation are available upon request.

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## CLEANING

Use a suitable thinner (Xylene / MEK / Acetone) in case of spillage, absorb and dispose of in accordance with local applicable regulations.

## WATCHPOINTS

No additions or omissions are required and on no account should attempts be made to split packs. Unsuitable in situations where foodstuffs or potable water will be in contact with the coating.

## STORAGE AND SHELF LIFE

Shelf life is 12 months when stored under cover, out of direct sunlight and protected from extremes of temperature.

## 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.

## HEALTH AND 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.

## QUALITY AND CARE

All products originating from Master Builders Solutions Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

\* Properties listed are based on laboratory controlled tests.

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### STATEMENT OF RESPONSIBILITY

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### NOTE

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

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