

# MasterProtect® 1812

Amine-cured, pitch free epoxy

## DESCRIPTION

A solvent-free, highly chemical resistant noncarcinogenic 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, steel pipes and non ferrous metals.

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

## FEATURES

- 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 colors to differentiate system build-up.

## PACKAGING

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

## COLOURS

Light Grey and Black

## SOLIDS CONTENT

By Volume: 100%

## THEORETICAL COVERAGE RATE EXPOSURE CONDITIONS

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

## VOC VALUES

18.25g/Lt

## DRY TEMPERATURE AND RESISTANCE

160°C

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

## IMMERSION TEMPERATURE RESISTANCE

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

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## LIMITATIONS

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

## SURFACE AND SUBSTRATE PREPARATION 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.

## CONCRETE

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.

## PRIMER

**MasterSeal P 659**

## APPLICATION

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

Physical Characteristics				
Appearance	Viscous coating			
Mixed Density (kg/L) ASTM D1475	~ 1.5			
Tensile Strength at 7days ASTM D 638	21.04 MPa			
Elongation at break ASTM D 638	2.23%			
	Application Temperature			
	10°C		25°C	40°C
Pot-life - ASTM D 2471	4 hrs		80 minutes	50 minutes
Tack-free time - ASTM C 679	6 hrs and 30 minutes		4 hrs	1 hr and 40 minutes
Touch-free time	13 hrs		8 hrs	4 hrs
Bond strength (7 days) ASTM D 4541	DFT 300 µm		DFT 500 µm	
	Concrete	Steel	Concrete	Steel
	3.00 MPa (Concrete failure)	4.35 MPa (Adhesive failure)	3.34 MPa (Concrete failure)	4.25 MPa (Adhesive failure)
Dry Heat Aging Test at 160°C continuous for 30 days (300µ) DFT	1.55 MPa (Concrete failure)	4.59 MPa (Adhesive failure)	1.79 Mpa (Concrete failure)	4.61 MPa (Adhesive failure)
Abrasion Test (CS17 wheel / 1000g / 1000 cycle) at 7 days ASTM D 4060	30 milligram		17 milligram	
Permeability Test at 5bars of pressure BS EN 12390 Part 8: 2000	negligible		negligible	

Test reports & additional documentation are available upon request.

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## 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. Unsuitable in situations where foodstuffs or potable water will be in contact with the coating.

## HEALTH AND SAFETY CLEANUP

Use MasterTop Thinner No.2 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.

## 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.

## NOTE

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

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

## QUALITY AND CARE

All Master Builders Solutions 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 Master Builders Solutions ESHQ recommendations.

\* Properties listed are based on laboratory controlled tests.

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## CONTACT

Should you require any further information, please do not hesitate to contact us:

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In view of widely varying site conditions and fields of application of our products, this technical data sheet is meant to provide general application guidelines only. This information is based on our present knowledge and experience. The customer is not released from the obligation to conduct careful testing of suitability and possible application for the intended use. The customer is obliged to contact the technical help-line for fields of application not expressly stated in the technical data sheet under "Fields of Application". Use of the product beyond the fields of application as stated in the technical data sheet without previous consultation with Master Builders Solutions and possible resulting damages are in the sole responsibility of the customer.

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