

MASTERSEAL[®] SP120 PF

Amine-cured, pitch free epoxy

Description

A solvent-free, highly chemical resistant non-carcinogenic coating. In appearance, MASTERSEAL[®] SP120 PF is smooth and glossy.

Typical applications

MASTERSEAL[®] SP120 PF 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.

MASTERSEAL[®] SP120 PF 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 colours to differentiate system build-up.

Packaging

MASTERSEAL[®] SP120 PF is supplied in 27kg (18 litres) units.

Colours

Light Grey and Black

Solids content

By Volume: 100%

Theoretical coverage rate

Exposure conditions

Moderate	Total DFT	200-300µm
Primer	MASTERSEAL P659	150-300g/m ²
Skim Coat	MASTERTOP Filler 2200	As required
Top Coat	MASTERSEAL SP120 PF	180-255g/m ²
Severe	Total DFT	325-500µm
Primer	MASTERSEAL P659	150-300g/m ²
Skim Coat	MASTERTOP Filler 2200	As required
Body Coat	MASTERSEAL SP120 PF	180-255g/m ²
Top Coat	MASTERSEAL SP120 PF	180-255g/m ²
Immersion	Total DFT	450-650µm
Primer	MASTERSEAL P659	150-300g/m ²
Skim Coat	MASTERTOP Filler 2200	As required
Body Coat 1	MASTERSEAL SP120 PF	180-240g/m ²
Body Coat 2	MASTERSEAL SP120 PF	180-240g/m ²
Top Coat	MASTERSEAL SP120 PF	180-255g/m ²

VOC values

18.25g/Lt

Dry temperature 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 BASF 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.



The Chemical Company

MASTERSEAL[®] SP120 PF

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 Masterseal SP120 PF. 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.

Primer

MASTERSEAL P 659

Performance data

Physical Characteristics				
Appearance	Black resinous thixotrope			
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.

MASTERSEAL[®] SP120 PF

Application

Masterseal SP120 PF may be applied by airless spray, 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. Unsuitable in situations where foodstuffs or potable water will be in contact with the coating.

Health and safety

Cleanup

Use Solvent #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 BASF representative.

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

Quality and care

All products originating from BASF's 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, ISO 14001 and OHSAS 18001.

11/2009 BASF_CC-UAE revised 11/2011

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.