

# MASTERSEAL® SP120

**A two component solvent free pitch  
extended epoxy resin coating system**

## Description

MASTERSEAL SP120 is a two-component solvent free, liquid epoxy resin modified with refined coal tar pitch. The superior adhesion and chemical resistance of the epoxy resin, in combination with the flexibility and water resistant qualities of pitch produce a system that will provide a high build, ultra dense coating to protect concrete, other cementitious substrates, and metal, against a wide range of aggressive media. The coating will not support the growth of bacteria. In appearance, MASTERSEAL SP120 is smooth, glossy and black.

## Typical applications

MASTERSEAL SP120 is used to provide a heavy duty protective, waterproof, and flexible coating. Uses include, the lining of tanks, pipes and ducting, coating concrete, asbestos cement, steel pipes and non ferrous metals.

MASTERSEAL SP120 is particularly suitable for use in sewerage work applications and in offshore or marine environments.

## Advantages

- No primer required.
- High build coating.
- Easy application: brush, roller, spray.
- Economical.
- Excellent chemical resistance to aqueous media.
- Non-solvented.
- Excellent broad spectrum chemical resistance.
- Abrasion resistant.
- Seamless finish.
- Pre-weighed components.
- Long term corrosion protection.

## Packaging

MASTERSEAL SP120 is supplied in 10 litre units.

## Typical properties\*

Properties listed are only for guidance and are not a guarantee of performance.

Pot life:	25°C	50 mins
	40°C	20 mins
Tack free time:	25°C	12 hours
	40°C	5 hours
Initial cure:	Within 24 hours at 25°C	
Full chemical resistance:	7 days at 25°C	

## Standards

ANSI/ASTM: C881: Type III: Grade 2:  
Class C.  
BS 5493.

## Directions for use

### Surface preparation:

As with all epoxy resin systems, surface preparation has a direct effect on the performance and durability of the system.

Surfaces to be coated should be sound, dimensionally stable, clean, free from laitance, paint, oil, grease, mould release agent and residual curing compound. Concrete must be fully cured. Grit blasting, high pressure water jetting or mechanical scabbling may be necessary to ensure full removal of cement laitance and deleterious matter. Metal surfaces should be prepared by blast cleaning preferably to SA2½.

Blow holes, pin holes and other surface defects should be filled with CONCRESE 2200.

### Mixing instructions:

MASTERSEAL SP120 is supplied in preweighed units. Mix the reactor component separately for 1 minute, using a slow speed high torque drill with suitable paddle attachment then pour the reactor onto the base tin and mix the two components together for 2-3 minutes until a uniform streak free mix is obtained. During the mixing process, make sure the material around the sides and bottom of the container are well mixed.

### Application:

MASTERSEAL SP120 can be applied by brush short hair roller or airless spray. A fast setting spray grade version MASTERSEAL SP120S is available for twin feed airless spray in 400ltr (2 x 200ltr) bulk packing.

### Brush / roller application:

Apply the mixed material to a properly prepared substrate using a brush or short hair roller. The use of a painters tray is essential to extend the pot life and correctly meter the material on to the brush or roller. Working well into the substrate to give complete coverage with no visible pinholes; apply in two coats at the rate of 0.3 ltr/m<sup>2</sup> to obtain a DFT of 300 microns.

### Spray application:

This is particularly recommended for large applications. A jet size of 23-26 thou has been found suitable. Spray the MASTERSEAL SP120S onto the prepared surface to give an even, pinhole free surface to achieve a minimum DFT of 300 microns in two coats. To achieve greater film thickness allow to cure before applying subsequent coats.

To give specified protection, a minimum of two coats should be applied. Subsequent coats should be applied within 36 hours.

Spray equipment, tools, brushes and rollers should be cleaned using Cleaning Solvent No. 2.

### Coverage:

Note: Coverage is dependant on porosity and surface texture of the substrate.

### General exposure:

0.3 litre per m<sup>2</sup> for a total DFT of 300 microns minimum applied in two coats of 150 microns.

## Chemical resistance

Cured coating is resistant to:

- Distilled water
- Brine
- Effluent
- Barnacle growth
- Sewage
- Exhaust gases
- Marine bacteria
- Diluted acids and alkalis
- Salt solutions (Potassium, Sodium)

## 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.

## Storage

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

## Specification clause

Protection to those items indicated shall be with MASTERSEAL SP120 as manufactured by Degussa.

The coating shall be a two component, solvent free pitch extended epoxy resin based system. The dry film thickness shall be as specified by the Engineer and in general accordance with the manufacturer's recommendation.

## Health and safety

As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs. 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 Degussa representative.

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

## Quality and care

All products originating from Degussa 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.

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