



The Chemical Company

MASTERSEAL[®] SP120

A two component solvent free pitch extended epoxy resin coating

DESCRIPTION

MASTERSEAL SP120 is a two component, solvent free, self curing epoxy resin coating modified with refined coal tar pitch, to provide a high build, ultra dense, smooth and glossy coating to protect concrete and metal substrates, against a wide range of aggressive chemicals. It is available in black and red colours.

MASTERSEAL SP120 conforms to :
ASTM C881, Type III, Grade 2, Class C.

FIELDS OF APPLICATION

MASTERSEAL SP120 is recommended for application on substrates requiring protection from aggressive chemicals. Applications include :

- Sewage treatment tanks, pipelines etc.
- Effluent treatment tanks, drains, pipes, etc.
- Splash zone of off-shore structures

MASTERSEAL SP120 is not recommended for surfaces in contact with potable water and food stuffs.

FEATURES AND BENEFITS

Long term corrosion protection	Extends effective operative life of the substrate.
Good resistance to abrasion	Lowers maintenance costs.
High film build	Extended life. Saves cost of frequent application.
Good adhesion to even damp surfaces	Avoids expensive surface preparation to achieve 100% dry substrates.
Convenient mix ratio of 1:1 by weight	Minimises chances for wastage due to wrong proportioning.
Available in two colours	Facilitates monitoring of multi coat application.

TYPICAL PERFORMANCE DATA

Chemical Resistance

Cured coating is resistant to :

- sea water
- distilled water
- effluent
- sewage
- exhaust gases
- dilute acids and alkalis

PROPERTIES

	Part A	Part B
Colour	Clear	Black, Red
Form	Liquid	Viscous Liquid
Density (mixed)	1.65 kg/L	

Curing properties at 30 °C

Pot Life	: 2½ hr
Tack-free time	: 8 hr
Initial cure	: 24 hr
Full cure	: 7 days

APPLICATION

Surface Preparation

Correct substrate preparation is critical for optimum performance. Surfaces should be structurally sound, clean, and free from loose particles, oil, grease, moss, fungus growth, barnacles or any other contaminants. Remove oil grease and wax contaminants by scrubbing with industrial grade detergent or degreasing compounds followed by mechanical cleaning.

Remove cement laitance, loose particles, moss, fungus growth, barnacles and other contaminants from the surface by wet grit blasting, high pressure water jetting (approximately 150 bars) or such other effective methods.

Even out all unevenness such as blowholes, pinholes and other surface defects with CONCRESEAL 1438. (See separate data sheet).

Steel surfaces : Prepare the surface to SA 2½. equivalent using wet gritblasting. It is recommended that this preparation is carried out just before the commencement of application.

Mixing

Mechanical mixing is necessary. A slow speed (600 rpm) drill with a wing type mixing paddle is recommended.

MASTERSEAL SP120 is supplied in pre-proportioned kits for complete mixing.

Stir each component individually. Empty the whole of Part A into the container of Part B. Mix for 2-3 minutes until a homogeneous mix with uniform colour is obtained.

Priming

For optimum bonding with substrates, especially with metallic ones, prime the prepared surface using **MASTERSEAL SP120** Primer (consult BASF Construction Chemicals for details).

BASF Construction Chemicals offices in ASEAN

Singapore
Tel : +65-6861-6766
Fax : +65-6861-3186

Malaysia
Tel : +60-3-3344-3388
Fax : +60-3-3344-2288

Indonesia
Tel : +62-21-893-4339
Fax : +62-21-893-4342

Thailand
Tel : +66-2204-9427
Fax : +66-2664-9267

Vietnam
Tel : +84-650-743-100
Fax : +84-650-743-200

Philippines
Tel : +63-2-632-9995
Fax : +63-2-632-9996



The Chemical Company

MASTERSEAL[®] SP120

Placing

MASTERSEAL SP120 can be applied by spray, brush or short nap roller. Normally, application in two coats to a total thickness of 0.3 mm is adequate.

For heavy duty protection, the total film thickness can be increased up to 0.5mm.

Apply the mixed coating onto the prepared substrate using a brush or a short nap mohair roller at the rate of 0.15 L/m² (0.25 kg/m²) per coat. At least two coats must be applied, with the second coat applied 10 to 24 hours after the first coat and at right angles to it.

The coats should be of different colours for easy monitoring. The final thickness of the coating should be approximately 0.3 mm.

Where large areas have to be treated, use an airless spray equipment, with a nozzle tip size of 0.6 – 0.7 mm.

Spray **MASTERSEAL SP120** onto the prepared surface in two coats to give an even, continuous film of min. 0.15 mm per coat.

EQUIPMENT

Mixing : A heavy duty slow speed (600 r.p.m.) drilling machine fitted with a wing type paddle.

Spraying : An airless spray gun.

CLEANING

Clean tools and equipment using a suitable solvent such as acetone or xylene before the resin system hardens. Special care has to be exercised in cleaning the spray nozzles.

ESTIMATING DATA

The minimum recommended coverage of **MASTERSEAL SP120** is 150 ml/m² (0.15 mm w.f.t.) to obtain a 0.15 mm thick dry film build per coat.

Therefore, material requirement is approximately 0.5 kg (0.3 L/m²) for 0.3 mm thick dry film in two coats. i.e. each 35 kg (approx. 21 litre) pack of **MASTERSEAL SP120** will cover 66m² in two coats each of 0.15 mm.

For a 500 micron cured film (heavy duty protection), the pack covers approx. 42 m².

Actual coverage depends on the number of coats, surface profile, loss and wastage.

PACKAGING

MASTERSEAL SP120 is supplied in 35 kg (21 litres) packs consisting of 17.5 kg each of parts A and B.

SHELF LIFE

12 months when stored in unopened original packing, under cover, out of direct sunlight and at moderate temperatures.

PRECAUTIONS

Health : **MASTERSEAL SP120** contains certain chemicals which can cause skin irritation if exposed and respiratory reaction if inhaled. Wear gloves, masks and use barrier creams while handling the product. Wash thoroughly after handling.

Should skin contact occur wash immediately with soap and water, or an effective hand cleaner.

In case of accidental eye contact wash with copious quantities of water and seek medical help immediately.

If ingested, drink large quantities of water. Do not induce vomiting. Consult doctor immediately.

The vapours of solvents used for cleaning can be irritating. It is therefore recommended that cleaning is done in well ventilated areas.

Fire : Keep away from sources of ignition. Do not smoke while handling the product.

Flash point : Part A – above 75°C,
Part B – above 100°C.

For detailed Health, Safety and Environmental Recommendations, please consult and follow all instructions on the product Material Safety Data Sheet.

1-1-1-1106

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this **BASF Construction Chemicals** publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

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