

# MASTERSEAL™ 260

2-component, Solvented, aliphatic, Polyurethane based protective coating for concrete & metal

## Description

MASTERSEAL 260 is a two-component polyurethane resin system, comprising pigmented base and a hardener, specifically formulated to protect concrete and steel. On mixing of the two components, it yields a chemical resistant protective coating, which cures to a high glossy, ultra dense surface that is easily cleaned and hygienic.

## Uses

MASTERSEAL 260 is recommended as a protective coating for the interior & exterior areas.

Applications include:

- Clean rooms in pharmaceutical facilities
- External protection of buildings
- Dairies & grain silos
- Pulp and paper plants
- As a gas and vapour barrier coating to concrete and metal surfaces.
- As protective coating in oil refineries, paper mills, power stations, garages, hospitals, hangars, etc.
- UV protection to Epoxy based systems & coatings

## Advantages

- UV Resistance – Long lasting
- Impermeable – vapour barrier for low RH areas
- High chemical resistance
- Superior surface finish
- Hard surface - Easy to clean
- Resistant to mould growth & abrasion

## Typical properties

Volume Solids	: 57± 3 %
Pot life	: 120 Minutes at 25°C 50 Minutes at 40°C
Mixed density	: 1.20 at 25°C ca
Mixing Ratio, by volume	: 4(Base) : 1(Hardener)
Touch dry	: 90 Minutes at 25°C
Recoatable	: 6 - 8 Hours at 25°C
Final cure	: 7 Days at 25°C
Adhesive bond strength to concrete (ASTM D 4541)	: >2 MPa (concrete failure)
Abrasion Resi, (ASTM D4060)	: < 125 mg/ 1000 cycle, CS17 wheel
UV resistance (ASTM G53)	: > 1000 hrs.
DFT (in two coats)	: 100 microns

## Specification Clause

The 2-component polyurethane protective coating shall be MASTERSEAL 260, a high-build, aliphatic PU formulation. The product shall exhibit excellent bond strength with the concrete substrate at least exceeding 2 MPa, when tested as per ASTM D4541. The product shall be formulated with minimum volume solids of 54% and to achieve dry film thickness exceeding 50 microns in two coats. The product shall offer good abrasion resistance, <125mg/ 1000 cycle when tested to ASTM D4060, CS17 wheel.

## Directions for use

### Surface preparation

It is most important to ensure that thorough surface preparation is undertaken prior to application of the MASTERSEAL 260 coating.

### Concrete

Ensure concrete is at least 28 days old and sound. Oil, grease, mould release agent, curing membrane, and such other contaminants must be removed by mild detergent and water, and by thoroughly scrubbing with a soft brush.

If the wall surface is damp or water is seeping out, it is necessary to stop the leakage before coating. For advice on the appropriate method for the site situation, contact BASF.

It is important to note that the final finish obtained is entirely dependent on the surface finish of the substrate.

Where a hygienic surface is critical such as in potable water tanks and food industries even out all unevenness such as blowholes, pin holes and other surface defects with CONCRESEIVE 2200 before application of coating.

### Steel

Remove all previous surface treatments and corrosion products by sand/shot blasting to SA 2½ finish or to bright metal finish. Do not allow long time gap between the surface preparation and the coating to prevent re-oxidising of metal before application of MASTERSEAL 260.

### Priming/Basecoat

Priming is not essential for concrete substrate, as MASTERSEAL 260 has low viscosity and can self prime the substrate. For metal substrate use CONCRESEIVE ZRi as the primer.

In the event of moist concrete substrate, it's advisable to use MASTERTOP 1700 PRIMER as base coat cum primer with coverage not exceeding 5 m<sup>2</sup>/Kg.

To extend the service life of the coating in harsh environments or in the event of coating subjected to moderate wear and tear, it's advised to use one to two coats of MASTERSEAL 180 as the base coat to achieve high performance of the system.

Allow primer or base coat to totally dry before proceeding with the top coating of MASTERSEAL 260.

### Mixing

MASTERSEAL 260 is supplied in two pre-weighed components, Base and Hardener. Properly stir each component separately before mixing together to ensure uniform consistency.

MASTERSEAL 260 is supplied in pre-proportioned kits for complete mixing. Combine Hardener and Base component in a suitably sized container. Ensure to scrap the sides of the containers to ensure a complete reaction.

Mix properly for 3 minutes with a slow-speed drill and wing style mixing paddle at 300-400 rpm until a homogeneous colour is achieved. Keep the paddle below the surface to avoid entrapping air. Do not mix by hand.

### Application

MASTERSEAL 260 can be applied using short nap roller, shorthaired brushes or by airless spray. Apply in two coats preferably in contrasting colours, each at a W.F.T. of 85 to 90 microns, the second coat applied after the first coat has dried (6-8 hours at 25°C) and at right angles to it.

### Airless spray

For application by airless spray, use a pump with nozzle tip of size 0.33 mm to 0.45 mm & more than 2000 psi pressure.

### Coverage

Each 5 Litre pack is sufficient to coat approximately 25 - 27 m<sup>2</sup> at 100 microns DFT in two coats.

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

### Packaging

MASTERSEAL 260 is supplied in 5 litre pack consisting of Base and Hardener.

### Storage and Shelf life

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment.

Shelf life is 12 months when stored as above.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advices consult BASF's Technical Services Department.

### Safety precautions

As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs (which can also be tainted with vapour until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use. Do not reuse containers for storage of consumable item. For further information refer to the material safety data sheet. MSDS available on demand or on BASF construction chemicals web site.

### Note

All BASF Technical Data Sheets are updated on regular basis; it is the user's responsibility, to obtain the most recent issue.

Field services where provided, does not constitute supervisory responsibility, for additional information contact your local BASF representative.

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