

MASTERTOP™ 20

Concrete hardening and dust proofing liquid

Description

MASTERTOP 20 is a colourless low viscosity liquid for application to concrete. It hardens and dust proofs both the old & new concrete surfaces.

Uses

- To reduce the dusting of poorly cured concrete
- To add life to concrete floors
- Industrial floors & decks
- Ramps and parking bays
- Warehouses and car parks
- RCC Structures as economical weather protection

Advantages

- Permanently converts free lime to hard crystals Acts by chemical action – not by protective film.
- New or old floors can be treated.
- Easy to apply and quick drying
- Used straight from the container.
- Surface densifying – Increased resistance to rubber wheel marks
- Economical to use
- Contains no VOC – environment friendly

Action

By combining with the free lime produced during hydration of the cement, MASTERTOP 20 forms hard insoluble crystals thus binding the particles together and sealing the surface to form a hard non-dusting surface. This chemical reaction results in a shine, and it can densify the surface of cured concrete.

The product also lowers the reactivity of the surface to aggressive chemicals such as, mild acids.

Typical properties

Aspect	: Clear liquid
Improvement in abrasion resistance (ASTM D4060, CS17 wheel, 1000 cycle)	: >35% over control
Chloride ion content	: < 0.2 %

Specification Clause

The liquid surface hardener cum dustproofers shall be MASTERTOP 20, clear non-organic formulation. The product shall be capable of improving the surface abrasion resistance by at least 35% when tested as per ASTM D4060 CS17 wheel at 1000 gm/ 1000 cycle. The product shall effectively seal the pores of the concrete surface by hard crystalline structures while retaining the breathability of the substrate.

Directions for use

Surface preparation

GENERAL CLEAN UP: Remove all dirt, dust, oil, grease, asphalt, foreign matter, and parting compound. Use detergents or caustics as needed.

FRESHLY PLACED CONCRETE: Before application, complete finishing operations and allow visible surface water to disappear. Surface must be able to bear foot traffic without marring or damaging the concrete.

NEWLY CURED BARE CONCRETE: Where concrete has not been membrane cured, perform after-construction clean up. Level any area gouged by trades and follow general clean up instruction.

AGED CONCRETE OR TERRAZO: Mechanically remove aged membranes. Restore surface soundness by patching, grouting and crack-filling. And follow general clean up instructions.

VERTICAL WORK: After from stripping, repair and refine surface to meet job requirements. Remove parting compound remnants. Surface must be clean and free of visible surface water.

Application

Agitate MASTERTOP 20 in the factory-supplied container before application. Apply evenly by sprayer, squeeze, roller or mop. Porous concrete may require more than 1 coat. A second coat is recommended for most applications. Take care to avoid puddling.

FIRST COAT

Apply material uniformly to substrate while keeping the entire area saturated for at least 30 – 40 minutes to ensure maximum absorption. Redistribute as necessary to avoid surface drying during this time. (Extra care should be taken on porous or absorptive concrete.)

When the surface begins to gel, apply light water spray and squeegee away excess material. Allow surface to dry.

MASTERTOP 20 dries in about 30 minutes, depending on ambient conditions. Allow 1 hour between applications.

SECOND COAT

Apply material uniformly to substrate, keeping the entire area saturated for 5 minutes. Mop or squeegee

away any excess material immediately. Avoid buildup of material in low spots. Allow surface to dry completely.

Do not wash treated area for at least 24 hours after application.

Over time, properly maintained concrete surfaces treated with MASTERTOP 20 will develop a glossy shine. Buffing the surface after drying will help bring out the shine more quickly.

CAUTION: If white crystals develop, rinse and brush entire area with hot water and squeegee away. Repeat process until crystals disappear.

Watch points

- New concrete should be allowed to cure fully (28 days minimum)
- Hard compacted / power floated surfaces may not have sufficient porosity to allow absorption of the MASTERTOP 20. Prior to treatment test for absorption of water. If concrete is absorbent, test a small area with neat MASTERTOP 20 and diluted MASTERTOP 20 to see whether penetration is achieved. Then proceed accordingly. If in doubt, ask for technical assistance from your BASF representative.
- MASTERTOP 20 is not suitable for floors of high porosity In such cases the use of MASTERKURE 181 should be considered.
- Before the application, the installer should prepare a jobsite sample for the acceptance of the owner.
- Do not use on liquid-membrane cured surfaces without proper removal of the material
- Do not allow material to contact glass, fabric, metal or painted surfaces.
- Not recommended for coloured dry-shake floors.

Equipment care

All equipment should be washed in clean water immediately after use.

Coverage

As porosity and texture of concrete floors and cement paving vary considerably, it is not possible to quote accurate coverage rates, but the following will provide a guide:

Tamped concrete: Approx. 3.5-5m² /L in two coats
Smooth concrete: Approx. 5-7m² /L in two coats

Dense Power trowelled Approx. 9-10m² /L in one coat

Packaging

MASTERTOP 20 is available in 20 Ltrs carboy.

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 advice please 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.

Disclaimer

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.

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