

MASTERTOP® 105

Silicon carbide aggregate surface hardener

DESCRIPTION

Mastertop 105 is a non-metallic floor hardener, which contains silicon carbide and other specially graded aggregates. It is applied as a dry shake over freshly floated concrete to provide a durable, non-slip monolithic floor.

RECOMMENDED FOR

- Factories, workshops, showrooms, food and beverage processing areas, where a durable, non-rusting, non-slip floor is required to withstand moderate to heavy traffic
- Providing a durable, non-slip surface on ramps, stairs, landings etc. under wet or dry conditions
- Freezers & chillers with forklift traffic

Mastertop 105 is not recommended for use in areas where floor surface will be exposed to acids, their salts or materials which seriously and rapidly attack concrete. For applications under these service conditions consult BASF Construction Chemicals about their range of chemical resistant flooring systems, such as **Mastertop 1200** series.

FEATURES AND BENEFITS

- Tough surface
- Durable, hard wearing surface with good abrasion and impact resistance
- Extended service life. Provides a heavy duty finish for concrete with a longer serviceable life than plain concrete or natural aggregate surface hardeners
- Non rusting
- Provides resistance to iron-corrosive chemicals or solutions that may attack metallic aggregate floor hardeners
- Non-slip. Contains hard, chemically inert aggregates which resist polishing thus providing a safe surface for hazardous areas under wet or dry conditions
- Dense surface. Resists oil and grease penetration, and reduces dusting. Easier to clean resulting in low maintenance costs. Provides a more uniform and more intensely coloured surface than that available by other means
- Pigments used are both light fast and alkali fast to ensure the colour remains strong for a longer period
- Has greater abrasion resistance and surface strength than plain concrete
- Durable surface with increased resistance to weathering and longer serviceable life than plain concrete
- It is easily and quickly applied and worked into the surface of fresh concrete or toppings at above normal temperatures

PERFORMANCE DATA

Abrasion Resistance (ASTM C779)

0.34mm at 60 minutes (33MPa concrete more than 1.4mm at 60 minutes)

Impact resistance (LA Rattler)

40% weight Loss (33MPa concrete has 70% loss of weight)

Hardness

Mohs scale : Silicon carbide 9

(See Technical Sheet 22 for explanation of abrasion and impact tests and how they relate to long-term durability of the floor)

ESTIMATING DATA

The quantity of **Mastertop 105** required should be determined according to the anticipated service conditions.

Light to Moderate Duty: 2 to 3kg per m²

Moderate to Heavy Duty: 3 to 4kg per m²

APPLICATION

NOTE: Full installation directions including applying, finishing and curing **Mastertop 105** are contained in the Application Guide for **Mastertop 105**.

Preparation of the Concrete

Concrete for single course monolithic floors should be capable of achieving a 28 day compressive strength of 30MPa with a slump of 80mm or less, and with no more than 3% air. Concrete should not contain calcium chloride.

Mastertop 105 is applied as a dry shake over freshly wooden bullfloated concrete.

Installation Procedures

See the Application Guide (available from your local BASF Construction Chemicals Technical Representative) for details on all aspects of the successful application of **Mastertop 105**.

FIELD SERVICE

BASF Construction Chemicals recommends that the user request the free services of the local representative for a pre-job conference to carefully place each step of the installation.



The Chemical Company

MASTERTOP® 105

PACKAGING

Mastertop 105 is packaged ready to use in 25kg moisture resistant bags.

SHELF LIFE

Mastertop 105 has a shelf life of approximately 18 months when stored in a cool dry environment.

PRECAUTIONS

- Application is strongly recommended to be done after roofing is completed. ONLY attempt modest size slabs without a roof.
- Do not apply over concrete containing added calcium chloride.
- Do not apply over concrete containing aggregate contaminated with salt or salt water.
- Do not apply over concrete containing more than 3% entrained air. Higher entrained air contents are often required for concrete slabs exposed to water saturation and freeze/thaw cycles. The high air

content makes proper application of dry shakes difficult or impractical, depending on the dimensions of the placement and ambient conditions. Consult your local BASF Construction Chemicals technical representative for more information.

- Use only admixtures in the concrete that are approved by BASF Construction Chemicals.
- Do not use water, burlap or polyethylene covering for curing. Use only curing compounds approved by BASF Construction Chemicals.
- This product contains cement, which may cause irritation. Avoid contact with eyes and prolonged contact with skin.

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the BASF Construction Chemicals **Material Safety Data Sheet (MSDS)** from our office or our website.

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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. **BASF Construction Chemicals data sheets are updated on a regular basis and it is the user's responsibility to obtain the most recent issue.**

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by **BASF** 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.

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