The Chemical Company

MasterTop® 530 (Formerly known as THOROFLOW® LE)

For Industrial Floors, Cementitious-Acrylic Based Self Levelling Floor Coating

Description of the Product

MasterTop® 530, is a cementitious-acrylic based, two component, applied with 4-8 mm thickness, smooth surfaced, industrial type, self levelling steel fiber reinforced floor coating with high abrasion resistance.

Fields of Application

- In factory and warehouse floors,
- In car parks, garages and parking ways,
- In balconies and terraces,
- In loading bays,
- In worn and torn industrial floors.

Features and Benefits

- Smooth surfaced
- Easy and fast application, economic.
- High abrasion and compressive strength.
- Non-dusting, long lasting.
- Provides perfect adherence to the surface.
- Not effected from mechanical impact and heat changes.
- Pursuant to ASTM C672 - 84 (together with anti-icing salt) resistant to freeze-thaw cycle.

Application Procedure

Preparation of Substrate

MasterTop® 530 is provided as premixed ready to use sets depending on the mixing ratio. The quality of the concrete surface on which **MasterTop® 530** will be applied should be C20 type or minimum 350 dose and the slab should be at least 3 weeks old. The tensile strength of the surface concrete should be 1.5 N/mm² minimum, and the floor temperature should be

Technical Data

MasterTop® 530 Part A **MasterTop® 530** Part B	Contains mineral fillers, silica fume, steel fiber and special cement Acrylic copolymer dispersion	
Color	Grey	KR
Mixed Density	1.93 kg/liter	
Compressive Strength (7 days) (28 days)	 13.0 N/mm² 21.5 N/mm²	
Flexural Strength (28 days)	8.8 N/mm²	
Tensile Strength (28 days)	2.0 N/mm²	
Abrasion Resistance DIN 53754 (Taber) (1 kg 1000 rev) CS 17 disk (weight loss) H22 disc (weight loss)	 245 mg 301 mg	
Working time	30 minutes	
Fully Cured	28 days	

The above values are given for +23°C'de and 50 % relative humidity. Higher temperatures will shorten the times and lower temperatures will prolong.

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+10°C minimum. The surface should be well saturated with water and the surplus water should be removed.
The surface should be solid, sound, clean and free of dust and clean. Any oil, grease, rust, and wax residues should be thoroughly removed from the surface. Any laitance on the surface should be removed by sand or shot blasting or diamond grinding; outcome dust layer should be vacuumed off with industrial vacuum cleaners.

Uneven Surfaces

Cracks wider than 1 mm and recesses deeper than 8 mm should be repaired with suitable **MasterEmaco®** repair mortar. The repair of thin shrinkage cracks may be ignored.

Joints

All existing joints should be brought up to **MasterTop® 530** level. If **MasterTop® 530** coating is to be bonded to another coating, a 3 mm deep groove should be opened at the meeting line to seal the coating. If the coating is bonded to another coating other than the concrete (ceramic, epoxy etc), a movement joint should be cut and this joint should be filled with **Sonomeric® 1** or **MasterFlex®** series joint sealant.

Saturation of the Substrate with Water

At higher temperatures, in order to prevent fast water loss from the application surface, the surface should be saturated with water 1 day prior to the application. Make sure that there is no free water on the surface before starting the application.

Mixing

MasterTop® 530 Part B is poured into a clean mixing bucket. **MasterTop® 530** Part A is gradually added and two parts are mixed with a 400-600 rpm mixing equipment for 3-5 minutes until a homogenous, lump free mixture is achieved. The mixture is allowed to rest 3-5 minutes, and then after mixing for further 30 seconds and the product is ready to use.

Mixing Ratio

MasterTop® 530	Part A	Part B
Mixing Ratio	25 kg	8 kg
Mixed Density	1,93 kg/lt	

Application Method

Priming

For a perfect adherence, **MasterTop® 530** mixture should be applied on the surface with a stiff brush by letting it absorb.

Coating

The prepared mixture should be applied on the surface by spreading with an adjustable trowel before the primer dries. After the application, any entrapped air should be released with a spike roller.
Note: To achieve a seamless and smooth coating, an uninterrupted application should be made. Therefore, depending on the size of the application area, more than one mixing bucket should be used to provide an uninterrupted application and the prepared mixture should be poured successively on the surface for an effective coverage.

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Curing

Under normal circumstances, **MasterTop® 530** can be opened to foot traffic after 48 hours and to vehicle traffic after 72 hours. If there is a heavy traffic (steel wheeled trolleys etc) 7 days should pass before opening the coating to full load. In hot, dry and windy weathers, (when the temperature is over+25ºC and the relative humidity is below 55 %) as soon as **MasterTop® 530** sets; dry sand should be sprinkled over the surface. This will prevent the risk of uncontrolled fast curing. Sprinkled sand should be cleaned off the surface after 24 hours. When the temperature is below +10ºC and the relative humidity is over 90%, the curing time of **MasterTop® 530** is prolonged. In such cases, the surface should be opened to traffic at a later time.

Coverage

1.93 kg/m^2 in order to obtain 1 mm of thickness.

Watch Points

- If the ambient and surface temperatures are less than +5ºC and more than +25ºC, suitable temperatures should be waited for the application.
- Furthermore, the product shouldn't be applied at extremely hot, wet or windy weathers.
- The materials to be used at the appropriate temperatures should be brought and stored in the application area 1-2 days prior to the application and enabled to adjust the ambient conditions.
- In extremely cold conditions, heaters should be used to increase the ambient and surface temperature; and in order to increase the workability of the product, the packages should be preconditioned to +20 - +25ºC to become ready to use.
- **MasterTop® 530** should not be applied onto the frozen surfaces, when the temperature is below+10ºC and it is expected to drop below +10ºC within 8 hours following the application.
- The applications should be carried out by suitably qualified applicators.
- The working and reaction times of the cementitious systems are affected by the ambient and surface temperature and relative humidity in the air. Hydration slows in lower temperatures and this increases pot life and working time. Higher temperatures increase the hydration and the above mentioned times decreases accordingly. In order for the material to complete setting, the ambient and surface temperature should not drop below the allowed minimum temperature.
- **MasterTop® 530** is an industrial coating. Depending on the characteristics of the concrete, on which it is applied, **MasterTop® 530** may show color differences on the surface. This does not affect the mechanical characteristics of the coating.

Cleaning of Tools

Tools and equipment should be cleaned with water after the application. Hardened **MasterTop® 530** can only be cleaned by mechanical means.

Packaging

33 kg set
Part A: 25 kg polyethylene reinforced kraft bag
Part B: 8 kg plastic can

Storage

The product should be stored in its original package, in a cool and dry place protected from frost. For short term storage, maximum 3 palettes

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should be placed on top of each other and the shipment should be made on a 'first come, first go' basis. Palettes should not be placed on top of each other during long term storage.

Shelf Life

The shelf life is 12 months from the date of production under suitable storage conditions. Opened packages should be stored under suitable storage conditions and used within 1 week. **MasterTop® 530** part B freezes when the temperature is below 0ºC.

Health and Safety Instructions

It is dangerous to approach the application sites with fire. Fresh air should be circulated in the storage and the application sites. During the application, a protective apparel, protective gloves, goggles and masks which comply with the Occupational Health and Safety Rules should be used. Due to the irritation effect of the uncured materials, the mixture should not come into contact with skin and eyes; in case of a contact, the affected area should be washed with plenty of water and soap; in case of swallowing, a physician should be consulted immediately. No food or beverages should be brought to the application area. The product should be stored and kept out of reach of children. For detailed information please consult the Material Safety Data Sheet.

Disclaimer

The technical information given in this publication is based on the present state of our best scientific and practical knowledge **BASF Yapi Kimyasallari Sanayi A.Ş.** is only responsible for the quality of the product. **BASF Yapi Kimyasallari Sanayi A.Ş.** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones (08/2013).

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GOSB İhsandede Caddesi 1000, Sokak No=1
Gebze / Kocaeli TURKİYE

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EN 13813
SR B_{FL}-S1 B1,5 F5 C16

Synthetic resin screed/coating

Fire Behaviour	B_{FL}-S1
Bonding Strenght	B1,5
Flexural Strenght	F5
Compressive Strength	C16

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