



The Chemical Company

MasterTop® BC 375 N

Two component, Solvent Free, Semi-Elastic, Self Levelling Polyurethane Based Floor Coating

Description of the Product

MasterTop® BC 375 N is a two component, solvent free, self levelling polyurethane based industrial floor coating.

Fields of Application

MasterTop® BC 375 N forms the basis for **MasterTop® 1324** series polyurethane based systems.

- Warehouses,
- Manufacturing areas,
- Laboratories,
- Chemical and pharmaceutical industries,
- Shopping malls and supermarkets,
- Aircraft hangars,
- Exhibition and fair centers, garages.

Features and Benefits

- Easy to apply.
- High mechanical resistances.
- Anti-microbial surface.
- Easy to clean to create a hygienic environment.
- Crack bridging properties.
- Semi-elastic.
- Can be applied to asphalt as primer or coating.

Chemical Resistance

MasterTop® BC 375 N is resistant to diluted acids, sea water, soda solution and aliphatic solvents. If required, chemical resistance chart can be requested from our Technical Service.

Technical Data

MasterTop® BC 375 N Part A MasterTop® BC 375 N Part B	Polyurethane Resin Polyurethane Hardener
Color	Various RAL colors
Mixed Density	1.45 kg/liters
Viscosity	2800 mPas
Shore D Hardness (28 d)	70
Compressive Strength	50 - 55 N/mm ²
Flexural Strength	32 N/mm ²
Breaking Elongation(DIN 53504)	% 10
Substrate Temperature	+5°C +30°C
Pot Life	30 minutes
Ready for Traffic	12 hours
Recoating Interval	Min. 12 hours - max. 3 days
Fully Cured	7 days

The above figures are valid for 23° C and intended as a guide only and should not be used as a basis for specifications.

MasterTop® BC 375 N

Application Procedure

Preparation of Substrate

MasterTop® BC 375 N is a part of the **MasterTop® 1324** polyurethane coating systems. The substrates on which **MasterTop® BC 375 N** is to be applied should be primed with the relevant **MasterTop®** primer. It should be applied on the primed surface which has been maintained for coating, within the recoating interval. The concrete substrates on which the product is going to be applied should be C25 or dosage of 350 minimum and the concrete should be 3 weeks old at least. After the preparation of the surface, the tensile strength of the substrate should exceed 1.5 N/mm² (tested with an approved pull-off tester at a load rate of 100 N/s). The residual moisture content of the substrate should not exceed 4 % (tested with e.g. CM device). A damp proof course should be installed properly and be inact. The substrate temperature should remain +8°C minimum and the temperature of the substrate should at least be 3 K above the current dew point.

All substrates should be structurally sound, dry and clean. Oil, grease and other adhesion impairing contaminants should be removed. Bubble formation on the surfaces which absorbed oil should be removed with the usage of a blastrack or rotatiger. Oil contaminated substrates should first be pre-cleaned with an emulsifying cleaning detergent according to the supplier's instructions. Finally, the concrete or cement screed surface should be cleaned by using a high pressured water jet and excess water should be removed by a wet/dry vacuum cleaner.

Always consult with our technical services for applications on surfaces such as steel, bitumen and asphalt.

Mixing

MasterTop® BC 375 N is supplied as ready to use kits in the exact ratio. Before mixing, precondition both A and B parts to the temperature of +15 - +25°C. **MasterTop® BC 375 N** part A is pigmented. Mix the part A with an epoxy/polyurethane paddled drill at 300-400 rpm for 3-4 minutes until a homogenous color is achieved without causing air bubbles. Pour the entire contents of part B into the container of part A; make sure that there is no product left in the part B package. Scrape well the sides and the bottom of the container to ensure a thorough mixing. After mixing **MasterTop® BC 375 N** parts for 3-4 minutes, pour the mix into a fresh container, set it aside for a while and mix for another minute.

During **MasterTop® BC 375 N** application, if needed, 0.1-0.3 mm quartz sand at a weight ratio of 1/0.3 can be added.

Mixing Ratio

MasterTop® BC 375 N	Part A	Part B
Mixing Ratio	24.6 kg	5.4 kg
Mixed Density	1.45 kg/ltr	

When silica sand is added at a weight ratio of 1/0.3 to the **MasterTop® BC 375 N** mixture, the mixed density becomes 1.80 kg/liters.

Application Method

MasterTop® BC 375 N, should be applied using a notched trowel to achieve the desired thickness; when the coating reaches to a suitable consistency in accordance with the ambient conditions, any entrapped air should be released using a spike roller.

Surface Protection

In order to increase mechanical and chemical abrasion resistance, make the product resistant

MasterTop® BC 375 N

to UV lights and to achieve a matte finish. **MasterTop® BC 375 N** can be coated with **MasterTop® TC 465**. For detailed information, please consult with the related product brochure/data sheet.

Coverage

MasterTop® BC 375 N forms the basis for **MasterTop® 1324** polyurethane based coating systems. The coverage differs depending on the use within the system. System solutions should be checked for coverage.

Watch Points

- Avoid application under excessive heat or wind and/or when the ambient and/or substrate temperature is below +10 or above +30°C.
- 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 the workability of the product, the packages should be preconditioned to +20 - +25°C to become ready to use.
- Epoxy and polyurethane based floor coatings should be applied by specialists.
- The reaction and workability times of resin based systems depend on the ambient and substrate temperatures as well as the relative humidity. Under lower temperatures, the chemical reaction times are prolonged and this increases the pot life, coating interval and the working time. In addition to this, the consumption is increased as the viscosity increases. High temperatures ignite stronger chemical reactions and the above mentioned times decrease accordingly. For the material

to be cured properly, the ambient and the substrate temperatures should not fall below the specified limits. After the application, the material should be protected from direct contact with water for 24 hours minimum. Within this period, a contact with water may cause a surface carbonation and/or tackiness; both of which will cause the coating to lose its characteristics. In such cases, the overall coating should be removed from the floor and renewed.

- **MasterTop® BC 375 N** is supplied as ready-to-use kits. No solvent etc should be added during application.
- Mixing should be done with a mechanical drill at 300-400 rpm with epoxy/polyurethane mixing paddles.
- DO NOT MIX BY HAND.
- After the first mix, contents should be poured into a clean container and mixed once again.
- The empty packs should be consolidated and disposed properly in order to prevent reusing of the packages.

Cleaning of Tools

Used tools and equipment must be cleaned carefully with an appropriate solvent. Once cured **MasterTop® BC 375 N** can only be removed by mechanical means.

Packaging

30 kg set
Part A: 24.6 kg drum
Part B: 5.4 kg drum

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

MasterTop® BC 375 N

palettes 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.

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).

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.


Health and Safety Precautions

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

	
BASF Yapi Kimyasallari San. A.Ş. GOSB Ihsandede Caddesi 1000, Sokak No=1 Gebze / Kocaeli TURKIYE	
11	
EN 13813 SR D S2 d0 >3000mg C35 B2 IR3,5 Nm	
Synthetic resin screed/coating	
Fire Behaviour	D S2 d0
Wear Resistance TABER	>3000 mg
Compressive Strength	C35
Bonding Strength	B2
Impact Resistance	IR3,5 Nm

	
1020	
BASF Yapi Kimyasallari San. A.Ş. GOSB Ihsandede Caddesi 1000, Sokak No=1 Gebze / Kocaeli TURKIYE	
11	
1020 - CPD - 040 039920 EN 1504 - 2 : 2004	
Polyurethane based , two component, self levelling compounds	
Permeability to CO ₂	CO ₂ sp permeability > 50m
Permeability to water vapour	Class III:SD>50 m
Capillary absorption and permeability to water	w<0,1 kg/m ² .h
Adhesion strength by pull-off test	Rigid Systems With traffic >2,0 N/mm ² (1,5 min)
Abrasion resistance	10% improvement in abrasion resistance in comparison with a non impregnated sample
Impact resistance	After loading no cracks and delamination Class I:4 Nm