

# MasterTop® P 604

An economical, pre-filled, total solid (according to "Deutsche Bauchemie" stand- ard), two component epoxy resin based primer, suitable for mineral substrates.

### PRODUCT DESCRIPTION

**MasterTop® P 604** is a total solid, pre-filled, low viscosity, two component epoxy resin based primer.

# FIELDS OF APPLICATION

MasterTop® P 604 is designed for use indoor as a pore sealer primer or scratch coat on mineral substrates such as concrete or cementitious screed. You can use it as scratch primer by adding oven dried silica sand in a proportion of 1:0,5 till 1:0,8. MasterTop® P 604 was tested regarding emissions in MasterTop® 1273 system and fulfills the AgBB requirement. Moreover MasterTop® P 604 is a total solid primer according to the standard of the "Deutsche Bauchemie" and fulfills the requirements of standard DIN EN 13578 regarding compatibility on wet concrete.

#### **FEATURES AND BENEFITS**

- low viscosity
- easy to apply
- good penetration
- seals pores and capillaries
- · excellent bond to substrate
- pre-filled
- low emission in system

### **APPLICATION METHOD**

MasterTop® P 604 is supplied in working packs which are pre-packaged in the exact ratio (except for the deliveries in drums). Before mixing, precondition both A and B components to a temperature of approximately 15 to 25°C. Pour the entire contents of Part B into the container of Part A. DO NOT MIX BY HAND. Mix with a mechanical drill and paddle at a very low speed (ca. 300 rpm) for at least 3 minutes. Scrape the sides and the bottom of the container several times to ensure complete mixing. Keep the mixer blades submerged in the coating to avoid introducing air bubbles. DO NOT WORK OUT OF THE ORIGINAL CONTAINER. After proper mixing to a homogeneous consistency pour the mixed Parts A and B into a fresh container and mix for another minute.

NOTE: For drum formats, pre-mix part A with a mechanical drill and paddle at a very low speed (ca. 300 rpm).

Once part A has been homogenized, mix part A and part B together as previously described and respect the defined mix ratio (100:27) by using a scale.

MasterTop® P 604 should be applied when the ambient temperature is constant or falling as this will decrease the risk of bubble formation due to expansion of air that is enclosed in the concrete. After mixing, MasterTop® P 604 is applied to the prepared substrate by spreading with a squeegee or with a roller. We recommend to broadcast the wet primer with oven dried sand in order to improve

adhesion of the following layer in case of PU based coat application. The curing time of the material is influenced by the ambient, material and substrate temperatures. At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time and curing times. High temperatures speed up the chemical reactions thus the time frames mentioned above are shortened accordingly. To fully cure, the material, substrate and application temperature should not fall below the minimum.

After application, the material should be protected from direct contact with water for approx. 24h (at 20°C). Within this period, contact with water can cause a surface bloom and/or surface tackiness, both of which must be removed. The temperature of the substrate must be at least 3 K above the dew point both during the application and for at least 24 hours after the application (at 15°C).

### SUBSTRATE PRE-TREATMENT

All substrates (new and old) must be structurally sound, dry and free of laitance and loose particles. Clean floors of oil, grease, rubber skid marks, paint stains and other ad-hesion impairing contaminants. Mechanical surface profil- ing by grit or shot blasting, high-pressure water jetting, grinding or scabbling (including the necessary post-treatment) are the preferred floor preparationmethods.

After surface preparation the tensile strength of the substrate should exceed 1.5 N/mm² (check with an approved pull-off tester at a load rate of 100 N/s).

The residual moisture content of the substrate must not exceed 4% (check with e.g. CM device).

A damp proof course must have been properly installed and be intact.

# **CONSUMPTION**

The consumption of **MasterTop**® **P 604** as primer is between 0.3-0.8 kg/m² depending on filling grad, condition and porosity of the substrate. A second coat of 0.2-0.4 kg/m² of **MasterTop**® **P 604** is recommended for very porous substrates and improves the protection against rising damp.

Oven dried silica sand 0.3-0.8~mm should be broadcast at approximately  $1.0~\text{kg/m}^2$  not in excess into the still wet primer.

The above consumption figures are intended as a guide only and may be higher on very rough or porous substrates.

#### **CLEANING AGENT**

Re-usable tools must be cleaned carefully with **MasterTop® CLN 44** or with e.g. isopropanol.



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Technical data*				
Mix ratio			by weight	100:27
Density	Part A Part B mixed	at 23°C at 23°C at 23°C	g/cm <sup>3</sup> g/cm <sup>3</sup> g/cm <sup>3</sup>	1,62 1,02 1,44
Viscosity	Part A Part B mixed	at 23°C at 23°C at 23°C	mPa.s mPa.s mPa.s	9500 80 1400
Pot-life (30 kg unit)		at 12°C at 20°C at 30°C	Min Min min	60 30 15
Re-coating intervals		at 10°C at 23°C at 30°C	H H H H	Min. 16 Max. 48 Min. 6 Max. 48 Min. 3 Max. 24
Fully cured		at 10°C at 23°C at 30°C	D D D	5 3 2
Permissible substrate and ambient temperatures			°C °C	Min. 8 Max. 30
Permissible relative humidity max.		at 10°C at > 23°C	% %	75 85
Technical data cured material*				
Shore D hardness		after 7 d	after 7 days	
Compressive strength		after 28 days	N/mm <sup>2</sup>	55
Tensile strength		after 7 days	N/mm²	10

<sup>\*</sup>The above figures are intended as a guide only and should not be used as a basis for specifications.

# **PACKAGING**

**MasterTop® P 604** is supplied in 30 kg working packs and in 247 kg drums of Part A and in 200 kg drums of Part B.

# **COLOUR**

Light yellow

# **STORAGE**

Store in original containers, under dry conditions and a temperature between 15–25°C. Do not expose to direct sun-light. For maximum shelf life under these conditions, see "Best before." label.

# **EU REGULATION 2004/42** (DECOPAINT GUIDELINE)

This product conforms to the EU directive 2004/42/EG (Deco-Paint directive) and contains less than the maximum allowable VOC limit (Stage 2, 2010)

According to the EU directive 2004/42, the maximum allowable VOC content for the Product Category IIA / j is 500 g/l (Limit: Stage 2, 2010). The VOC content for MasterTop® P 604 is < 500 g/l (for the ready to use

### **WARNING AND PRECAUTIONS**

In its cured state, **MasterTop**® **P 604** is physiologically non-hazardous. The following protective measures should be taken when working with the material:

Wear safety gloves, goggles and protective clothing. Avoid contact with the skin and eyes. In case of eye contact, seek medical attention. Avoid inhalation of the fumes. When working with the product do not eat, smoke or work near a naked flame. For additional references to safety-hazard warnings, regulations regarding transport and waste management please refer to the relevant Material Safety Data Sheet. The regulations of the local trade as-sociation and/or other authorities, regulating safety and hygiene of workers handling epoxy resins must be followed.

product).



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#### **DISCLAIMER**

In view of widely varying site conditions and fields of application of our products, this technical data sheet is meant to provide general application guidelines only. This information is based on our pre- sent knowledge and experience. The customer is not released from the obligation to conduct careful testing of suitability and possible application for the intended use. The customer is obliged to contact the technical help-line for fields of application not expressly stated in the technical data sheet under "Fields of Application". Use of the product beyond the fields of application as stated in the technical data sheet without previous consultation with Master Builders Solutions and possible resulting damages are in the sole responsibility of the customer.

All descriptions, drawings, photographs, data, ratios, weights i.e. stated herein can be changed without advance notice and do not represent the condition of the product as stipulated by contract. It is the sole responsibility of the recipient of our products to observe possible proprietary rights as well as existing laws and provisions. The reference of trade names of other companies is no recom- mendation and does not exclude the use of products of similar type. Our information only describes the quality of our products and services and is no warranty. Liability is accepted for incomplete or incorrect particulars in our data sheets only in the event of intent or gross negligence, without prejudice to claims under product liability laws.

#### CONTACT INFORMATION

Master Builders Solutions Yapı Kimyasalları Sanayi ve Ticaret Ltd. Şti.

Adres: Barbaros Mah. Begonya Sok. Nidakule Kuzey Atasehir, C Kapısı No:3 E/5, 34746 Ataşehir İstanbul / Türkiye

Tel: 0216 217 88 00

Mail: mbs.tr@mbcc-group.com

Web: www.master-builders-solutions.com/tr-tr

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Master Builders Solutions Yapı Kimyasalları Sanayi ve Ticaret Ltd. Şti. Adres: Barbaros Mah. Begonya Sok. Nidakule Kuzey Ataşehir, C Kapısı No:3 E/5, 34746 Ataşehir İstanbul

#### DOP NO:04.1504.2.014

# EN 1504-2: 2004

MASTERTOP P 604 Beton Yapıların Korunması ve Tamiri İçin Mamuller ve Sistemler. Bölüm:2 Beton için Yüzey Koruma Sistemleri (Products and systems for the protection and repair of concrete structures

Part 2: Surface protection systems for concrete)
1.2 Yabancı madde girişine karşı koruma, 5.2 Fiziksel direnç

(Principles: 1.2 Protection against in	gress, 5.2 Physical resistance)
Kapiler su emme ve su geçirgenliği (Capillary absorption and permeability to water)	w<0,1 kg/m².√h
İşleme derinliği (Depth of penetration)	NPD
Çekip koparma deneyi yoluyla yapışma dayanımı (Adhesion strength by pull-off test)	Rijit sistemler Trafik yüküyle:≥2,0 N/mm²(1,5 min) (Rigid systems With trafficking:≥2,0 N/mm²(1,5 min))
Aşınma direnci (Abrasion Resistance)	Emprenye uygulanmış numunenin aşınma direnci, emprenye uygulanmamış numuneden en az % 30 daha yüksek olmalıdır. (Impregnated concrete abrasion resistance must high at least 30 % than unimpregnated concrete)
Çarpmaya direnç (Impact resistance)	Sinif 1 (Class 1)
Yangına karşı tepki (Reaction to fire)	E
Tehlikeli maddeler (Dangerous substances)	Madde 5.4'e uygun (Comply with clause 5.4)