# Griptop® MD





## **DESCRIPTION**

Griptop MD is a three-pack water based polyurethane topping that provides floor surfaces with a seamless, hygienic and cosmetically attractive matt finish. It is designed for medium to heavy duty food and chemical processing areas, dairies, breweries, etc.

Griptop MD is flow applied to horizontal surfaces and has very good durability towards pedestrian and vehicular traffic. It also has very good resistance to many of the chemicals commonly found in an industrial environment.

Griptop MD can be supplied in a variety of colours (consult our Sales Department for further details).

#### **ADVANTAGES**

- » Resistant to thermal shock and temperatures between
- >> -25°C to 80°C @ 6 mm thickness and -15°C to 60°C @ 4 mm thickness.
- » Easy to clean.
- » Resistant to a wide range of chemicals (consult DCP Technical Department for more details).
- » Hard wearing and good impact resistance.
- » Slip resistant.

#### **STANDARDS**

Griptop MD complies with EN13813, Class SR-B2.0-AR0.5-IR10.

## **CHEMICAL RESISTANCE**

Griptop MD provides resistance to a wide range of chemicals commonly encountered in the food and pharmaceutical industries, these chemicals include:

- » Acetic Acid (50%): found in spirit vinegar
- » Lactic Acid (10%) @ 60°C: found in milk and dairy products
- » Oleic Acid (100%) @ 60°C: used in food processing as an emulsifier
- » Citric Acid (25%): found in fruits
- » Methanol (100%): representative of alcohols and a range of solvents used in pharmaceuticals.

Griptop MD is also resistant to a wide range of inorganic acids, mineral oils, fats, fuels and solvents. Please contact DCP Technical Department for advice.

Note: Some staining and discoloration may occur upon contact with certain chemicals, depending on the exposure time, nature and housekeeping regime employed. This will not adversely affect the performance of the product.

## **TECHNICAL PROPERTIES @ 25°C:**

Mixed density:  $1.90 \pm 0.05 \text{ g/cm}^3$ 

Pot life: 20 - 30 min

Bond strength: ≥ 2 MPa

ASTM D4541 (concrete failure)

Compressive strength:

BS 6319-2

≥ 48 MPa @ 28 days

Flexural strength:

BS 6319-3

≥ 15 MPa @ 28 days

Tensile strength:

BS 6319-7

≥ 6 MPa @ 28 days

Taber Abrasion: ASTM D4060

(1000 g, 1000 cycle)

H22 Wheel 1200 milligram CS17 Wheel 75 milligram

Shore D hardness:

**ASTM D2240** 

-15°C to 60°C @ 4 mm
Temperature thickness

resistance: -25°C to 80°C @ 6 mm

≥ 80

thickness

Coefficient of thermal

expansion:

4.5 x 10<sup>-5</sup>/°C

ASTM C531

Water absorption: Nil

The above data was developed under controlled laboratory conditions. Properties in the field may vary. Expect reasonable variations from these results, depending on material and ambient temperature, jobsite and test conditions.

#### **METHOD OF USE**

## SURFACE PREPARATION

The surface must be clean, dry (less than 75% RH measured by hygrometer) and free of laitance (see the Guide to Surface Preparation for further details). To ensure a good bond to the substrate, saw cut grooves that are twice as wide and twice as deep as the screed thickness. The grooves must be opened at a distance of 5 to 10 cm from coves and walls, running parallel to them.

For treatment of surfaces containing expansion joints, consult DCP Technical Department.

#### **Don Construction Chemicals India Private Limited**

Kaveripettai, Thiruvallur Dist., Chennai, Tamil Nadu RIICO Industrial Area, Manda Chomu, Jaipur India

info.india@dcp-int.com; marketing.india@dcp-int.com www.dcp-int.com

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#### **PRIMING**

Scratch coat of Griptop MD should be applied by trowel at 0.5 - 1.0 mm prior to the application of the product itself as floor topping in order to provide a mechanical key between the substrate and the floor coating.

Follow the mixing procedure shown below to prepare the scratch coat layer of Griptop MD and apply it over clean prepared substrate.

The scratch coat should be left for 24 - 48 hours to cure before the application of Griptop MD. If the scratch coat is left for more than 48 hours, it is recommended to abrade the coat and apply a fresh coat.

For surfaces with RH between 75 and 85%, prime with one coat of Strongcoat DPM and allow to dry prior to application of the scratch coat. For surfaces with RH greater than 86%, prime with 2 coats of Strongcoat DPM and allow the second coat to dry before priming with scratch coat.

Consult DCP's technical department for further details about the priming procedure.

Note: Surfaces may also be primed with Strongcoat Primer prior to application of Griptop MD (see Strongcoat Primer data sheet for further details).

## **MIXING**

Prior to mixing, stir the individual components to disperse any settlement. Transfer the entire contents of the hardener component to the resin component and using a Jiffy-type mixer attached to a slow running electric drill, or the rotary drum mixer, mix for approximately two minutes until a lump-free consistency is obtained. It is important to use a slow speed mixer, operating at 300 - 400 rpm, to ensure that there is no entrapped air and achieve a smooth mixture.

Once the Griptop MD hardener and resin components have been mixed, transfer all the mixed material into a Casco or Creteangletype mixer, taking care to ensure that the bottom and sides are thoroughly scraped. Start the mixer and gradually add the contents of the filler component. Continue mixing for approximately two minutes until a uniform, lump-free mix is obtained.

Note: Never mix Griptop MD by hand as this could lead to areas of uncured material.

#### **CHEMICAL RESISTANCE**

Occassional spillage, after full cure (28 days @ 25°C), ASTM D1308 (Spot - test @ 1 hr)

Organic Acids	
Oleic Acid sat.	R
Citric Acid 25%	R
Acetic Acid 10%	R
Lactic Acid 10%	R
Tartaric Acid 10%	R
Inorganic Bases	_
Sodium Hydroxide 40%	R
Ammonia Solution 10%	R
Potassium Hydroxide 50%	R
Aquous Solutions Sodium Chloride sat.	R
Chlorinated Water	R
Solvents	TX
White Spirit	R
·	
Xylene	R
Fuels	
Petrol	R
Diesel	R
Engine Oil	R
Hydraulic Oil	R
Brake Fluid	R
Inorganic Acids	
Hydrochloric Acid 10%	R
Nitric Acid 10%	R
Phosphoric Acid 20%	R
Sulphuric Acid 25%	R
Sugar Flavourings	
Sugar solution sat.	R
Glucose syrup sat.	R
Carbonated beverages	
Pepsi/Coca Cola	R
Mirinda/Fanta	R
7UP	R

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#### **APPLICATION**

Once mixing is complete, transfer the mixed Griptop MD to the primed surface and spread it evenly using a pin rake set to the required thickness or a notched trowel. Immediately after spreading, use a spiked roller to roll the surface and release any entrapped air. Avoid repeating this rolling process later.

## **WORKING TIME**

Griptop MD has a working time of approximately 20 minutes at  $25^{\circ}$ C.

Note: Never leave the mixed Griptop MD kit to stand for any length of time prior to application as this will considerably shorten its working time.

#### **WORKING CONDITIONS**

Griptop MD should not be applied at temperatures less than  $10^{\circ}$ C.

#### **CURING TIME**

At 25°C, Griptop MD can be opened to heavy wheeled traffic after 24 hours.

At the same temperature, it should be allowed to cure for seven days before exposing it to chemical contamination (consult our Technical Department for details of curing times at other temperatures).

#### SLIP RESISTANT FINISHES

For advice on slip resistant surfaces please consult our technical department.

## **LIMITATIONS**

- Ensure good ventilation in the application area to prevent excessive ambient humidity, which could affect the product's performance.
- To minimise colour fading and the effect of efflorescence, protect the installed floor from damp, condensation, and water for 4 to 5 days.
- The substrate and uncured floor must be kept at least 3°C above the dew point to reduce the risk of condensation or blooming on the surface.
- In areas of exposure to direct UV light, Griptop MD is susceptible to some yellowing with time, especially with light Griptop MD colours. This will not adversely affect the performance of the product.

#### **CHEMICAL RESISTANCE**

Occassional spillage, after full cure (28 days @ 25°C), ASTM D1308 (Spot - test @ 1 hr)

Electrochemical solutions	3	
Copper Sulphate 1M	R	
Zinc Sulphate 1M	R	
Fruit juices		
Orange juice	R	
Apple juice	R	
Lemon juice	R	
Fats		
Vegetable Oil	R	
Cleaning Aids		
Dishwashing liquid	R	

## **CLEANING**

R: Resistant

Once mixing, application and finishing are complete, tools can be cleaned with DCP Solvent.

## **PACKAGING**

Griptop MD is available in 19 kg (10 litre).

#### THICKNESS RANGE

4 - 6 mm

#### **COVERAGE**

Approximately 2.5 m<sup>2</sup>/kit at 4 mm thickness.

#### **STORAGE**

Griptop MD has a shelf life of 6 months from date of manufacture if stored in unopened containers and under good conditions at temperatures between 5°C and 30°C.

If these conditions are exceeded, contact DCP Technical Department for advice.

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## **CAUTIONS**

## **HEALTH AND SAFETY**

Griptop MD should not come in contact with skin or eyes. Goggles and gloves should be used.

In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary.

For further information refer to the Material Safety Data sheet

## Griptop® MD

## MORE FROM DON CONSTRUCTION PRODUCTS

A wide range of construction chemical products are manufactured by DCP which include:

- » Concrete admixtures.
- » Surface treatments
- >> Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.

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#### Note

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.