Griptop MD

Medium to heavy duty flow applied polyurethane topping

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 by trowel 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 (consult our Technical Department for further details). 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 −15°C to 60°C @ 4 mm thickness and −25°C to 80°C at 6 mm thickness.
- Provides hygienic floor.
- 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 EN 13813, 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:	1.9 ± 0.05 g/cm^3
Pot life:	20 - 30 min
Bond strength: ASTM D4541	≥ 2 MPa (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 CS17 Wheel	 1200 milligram 75 milligram
Shore D hardness: ASTM D2240	≥ 80
Temperature resistance:	−15°C to 60°C @ 4 mm thickness −25°C to 80°C @ 6 mm thickness
Coefficient of thermal expansion: ASTM C531	4.5 x 10^{-5}/°C
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 substrate must be clean, surface dry and free of laitance (see the Guide to Surface Preparation for further details).

Griptop MD can be applied directly onto newly poured concrete surfaces that are > 7 days old, as well as old existing concrete with high moisture content without the need for special primers, as long as there is no risk of rising damp or where a functioning Damp-proof membrane is provided underneath the slab.

Griptop MD

To ensure a good bond to the substrate, a 4 mm deep x 3 mm wide rebate should be cut around the edges of the floor, 150 mm from the walls and running parallel to them.

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

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.

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

Taking care to ensure that the bottom and sides are thoroughly scraped, transfer the entire contents of the Griptop MD Hardener container into the Resin container and, using a Jiffy-type mixer attached to a slow running electric drill, mix for approximately two minutes.

Once the Griptop MD Hardener and Resin 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 transfer to it the entire contents of the Griptop MD Filler container, taking care to ensure that these are completely dry and lump-free. Continue mixing for approximately two minutes.

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	
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

Griptop MD

APPLICATION

Once mixing is complete, transfer the mixed Griptop MD to the primed surface and even out using a pin rake adjusted to give the required thickness or using a notched trowel. Immediately after that, roll the surface with a spiked roller to release any entrapped air, and do not repeat rolling later on.

For more information about the application, please refer to the Method Statement of Griptop MD.

Note: 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.

FINISHING

Whilst still wet, thoroughly spike roll the Griptop MD.

WORKING TIME

Griptop MD has a working time of approximately 20 minutes at 25°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 5°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).

CLEANING AND HYGIENE

In order to enhance and maintain life expectancy, slip resistance and aesthetic properties, regular cleaning should be done using industry standard cleaning chemicals and equipment. Please contact DCP technical department for advice.

CHEMICAL RESISTANCE

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

Electrochemical solutions	
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

SLIP RESISTANT FINISHES

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

CLEANING

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

PACKAGING

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

THICKNESS RANGE

4 - 6 mm.

COVERAGE

Approximately 2.5 m² per kit at 4 mm thickness.

STORAGE

Store at temperatures between 5°C and 30°C.

SHELF LIFE

Griptop MD have a shelf life of 6 months from date of manufacture if stored in unopened containers and under good conditions.

If these conditions are exceeded, DCP Technical Department should be contacted for advise.

Griptop MD

CAUTIONS

HEALTH AND SAFETY

Consult the appropriate Material Safety Data Sheet prior to using each product.

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