



# SpECTop EU

HIGH STRENGTH EPOXY UNDERLAY

## DESCRIPTION

**SpECTop EU** is a high strength epoxy underlay supplied as a three-component system for mixing on site. **SpECTop EU** has been specially formulated to withstand chemical attack and impact shock. When laid correctly **SpECTop EU** will provide a surface with a slight texture ready to receive application of other **SpECTop** toppings.

## TYPICAL USES

**SpECTop EU** provides an economical method of levelling floors prior to laying alternative **SpECTop** epoxy screeds and toppings.

## ADVANTAGES

- Good impact and chemical resistance
- Economic levelling screed
- Can be overcoated with any other **SpECTop** resin flooring system after 24 hours

## DESIGN CRITERIA

**SpECTop EU** is designed for application in the range of 10mm-50mm. Greater thickness can be achieved by the application of subsequent layers.

## TECHNICAL DATA

### Typical result

#### Compressive strength

**(BS 6319) part 2 1983** 40N/mm<sup>2</sup> @ 7 days

#### Curing characteristics @ 35°C

**Pot life** 70 minutes

**Initial hardness** 10 hours

**Full cure** 7 days

Note that the values given above are typical figures achieved in laboratory tests. Actual values obtained on site may show minor variations from those quoted.

## APPLICATION

### Surface Preparation

It is essential that **SpECTop EU** is applied to sound,

clean and dry surfaces in order that maximum bond strength is achieved between the substrate and the flooring system. All dust and debris should be removed prior to application of the product or its primer.

### New Concrete Floors

Should be at least 28 days old with maximum moisture content not exceeding 5%. Laitance deposits on new concrete floors are best removed by light grit blasting, mechanically scabbling or grinding.

### Old Concrete Floors

Mechanical cleaning methods are strongly recommended on old concrete floors particularly where heavy contamination by oil and grease has occurred or existing coating are present. These may well have been absorbed several millimetres into the concrete. To ensure adhesion, all contamination should be removed by grit blasting.

### Priming

The prepared surface should be primed with **SpECTop Primer F1**.

The contents of the curing agent should be emptied into the contents of the base component and stirred with a spatula until the product appears uniform.

The mixed primer should then be applied to the prepared substrate by a stiff brush at 10-15m<sup>2</sup>/litre. Do not over apply.

If the primer appears to be absorbed into the surface easily, it will be necessary to apply a second coat once the initial coat is tack-free.

Allow the primer to become tacky prior to applying **SpECTop EU**.

### Mixing

**SpECTop EU** is supplied in a three- component kit

consisting of a base component, a curing agent and a bag of graded filler.



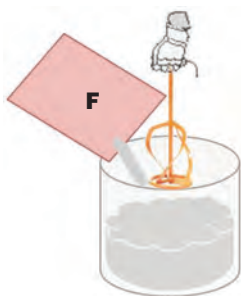
It is important that **SpECTop EU** is mixed correctly. Suitable mixing equipment must be used, such equipment being defined as either a slow speed electric plus mixing paddle or forced action mixers such as Creteangle, Mixal or similar machines. Where large volumes of products are required a small free fall concrete mixer may be used, however mix trials should be conducted to assess machine suitability.

Immediately prior to mixing the first batch of **SpECTop EU** the internal surfaces of the mixer and any mixing blades should be 'wetted out' with **SpECTop Cleaning Fluid**. Only sufficient solvent should be added to the mixer to ensure complete wetting of the surfaces with any excess being discarded prior to the addition of **SpECTop EU**.



Whilst the internal surfaces of the mixer are still wet with solvent, empty the complete aggregate bag from the **SpECTop EU** pack into the mixer. The aggregates

should be blended dry for one minute prior to the addition of the resin from the **SpECTop EU** pack.



Empty the entire contents of the resin hardener component into the can containing the resin base component and mix until homogeneous. When mixed, the resin

components are to be added to the aggregate in

the mixer. Mixing of all components shall continue for a further 3-5 minutes, until such time as the resin has evenly coated all the aggregates.

### Application

The mixed **SpECTop EU** should be spread to uniform thickness on the primed surface using either a garden rake or the edge of a plastic trowel. The material should be thoroughly tamped to ensure complete compaction and finally finished to an even texture using a wooden trowel. Screeding rods are useful to maintain the desired compacted thickness.

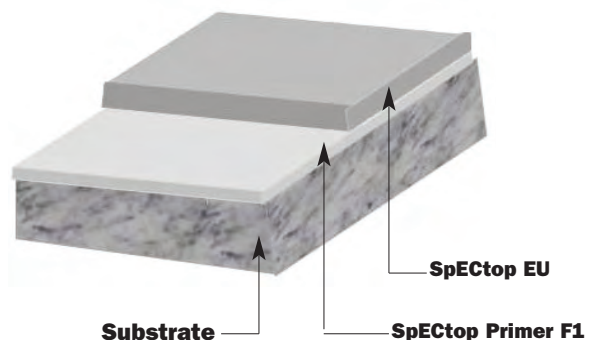
The material must be applied within the pot life after mixing. After this time unused material should be discarded.

### Overcoating

Overcoating of **SpECTop EU** with any other **SpECTop** floor system should not start until the **SpECTop EU** is at least 24 hours old. Note that **SpECTop EU** should be primed if required by the following **SpECTop** system.

### Expansion Joints

Expansion joints in the existing substrate should be continued through the **SpECTop EU** and any subsequent topping and filled to the required level with a suitable sealant - contact **SpEC Technical Department** for further details.



### EQUIPMENT CLEANING

All tools and equipment should be cleaned immediately after use with **SpECTop Cleaning Fluid**.

### PACKAGING & YIELD

**SpECTop EU** is supplied in a pack size below with the following recommended coverage rates:

---

## **SpECtop EU**

12 litres: 1.2m<sup>2</sup>/pack @ 10mm thickness

## **SpECtop Primer F1**

@ 10-15m<sup>2</sup>/litre

1 litre pack gives 10-15m<sup>2</sup>

5 litre pack gives 50-75m<sup>2</sup>

### **APPLICATION TEMPERATURE RANGE**

Minimum 5 °C

Maximum 35 °C

At temperatures above the quoted maximum the pot life will be reduced.

### **STORAGE & SHELF LIFE**

**SpECtop Primer F1** and **SpECtop EU** have a shelf life of 12 months when stored in a dry place below 35 °C in their original, unopened container.

### **HEALTH & SAFETY**

Contact with skin and eyes should be avoided. It is essential that adequate ventilation is provided and all personnel avoid inhaling the vapours produced.

If working is necessary in a confined area it is strongly recommended that sealed respiratory equipment is utilised.

If contact with skin occurs, rinse with copious amounts of clean water followed by thorough cleaning with soap and water. **DO NOT USE SOLVENTS**

If eye contact occurs, rinse with copious amounts of clean water and seek medical attention.

If swallowed, **DO NOT** induce vomiting. Seek medical attention immediately.

### **FLAMMABILITY**

**SpECtop Primer F1** and **SpECtop Cleaning Fluid** are flammable. Do not expose to naked flame or other ignition sources.

### **FLASHPOINT**

<b>SpECtop EU</b>	>150 °C
<b>SpECtop Primer F1</b>	>60 °C
<b>SpECtop Cleaning Fluid</b>	>40 °C

---

Issue 4: 03/2010

**QA-054**

Whilst the information and/or specifications given are, to the best of our knowledge, true and accurate, no warranty is given or implied in connection with any recommendations or suggestions made by us, our representatives, agents or distributors as the conditions of use and labour involved are beyond our control.

If it is proven that the product does not perform as described in our TDS, SpEC's liability extends solely to the free replacement of product, once the claim has been accepted after due investigation by SpEC. SpEC will not entertain any claims involving any form of consequential costs or damages such as shipping costs, custom duties, damages to third parties, damages to structures, penalties from delay of a project or any other form of consequential damage.

**SPECIALITY ENGINEERING CHEMICALS**

PO Box 61347, Dubai, United Arab Emirates. Telephone: +971 4 883 6662, Fax: +971 4 883 7696

E-mail: [info@spec.ae](mailto:info@spec.ae)

[www.spec.ae](http://www.spec.ae)