



# SpECtop PE5

HIGH BUILD, HARD WEARING PITCH EPOXY PROTECTIVE SURFACE COATING

## DESCRIPTION

**SpECtop PE5** is a four component epoxy resin protective surface coating, based on resins, coal tar and curing agents with chemically inert graded silica fillers. **SpECtop PE5** is formulated to provide excellent finish and application properties. **SpECtop PE5** is available only as a black resin system which is broadcast with **SpECtop Armourite Grain**.

## TYPICAL USES

**SpECtop PE5** is designed to offer an extremely hardwearing, low maintenance, anti-skid surfacing to a wide range of substrates including concrete, asphalt, steel and timber.

**SpECtop PE5** is ideally suited for Ro/Ro link spans, ship and oil/gas platforms, helicopter decks, car parks, walkways, industrial workshops and heavy plant/cargo handling areas.

## ADVANTAGES

- Extremely hard wearing
- Flexible
- Chemical resistant
- Non-slip, provides anti-skid surfacing
- Waterproof
- Excellent adhesion to steel, concrete, asphalt
- Solvent free to minimize disruption
- Resistant to flame spread
- UV resistant when dressed with recommended surface dressing aggregate

## TECHNICAL DATA

<b>Wet density</b>	1700kg/m <sup>3</sup> (slurry only)
<b>Volume solids (mixed)</b>	100%
<b>Pot life</b>	30 mins @ 20°C
<b>Cure time</b>	8-10 hrs @ 20°C
<b>Compressive strength</b>	31.2 N/mm <sup>2</sup> @ 14 days
<b>Flexural strength</b>	11.7 N/mm <sup>2</sup> @ 7 days

<b>Tensile strength</b>	4.1 N/mm <sup>2</sup> @ 7 days
<b>Initial Hardness</b>	18 hrs @ 20°C
<b>Open to light traffic</b>	24 hrs @ 20°C
<b>Vehicular traffic</b>	48 hrs @ 20°C
<b>Full cure</b>	7 days @ 20°C
<b>Mohs Hardness (dressing)</b>	9.2

## CHEMICAL RESISTANCE

**SpECtop PE5** is resistant to a wide range of chemicals. Specific data is available on request from the **SpEC Technical Department**.

## INSTRUCTIONS FOR USE

### Thickness guidelines

<u>Traffic density</u>	<u>Thickness</u>
Light	3.5mm
Medium	4mm
Heavy	5mm

## APPLICATION

### Preparation

#### Concrete

It is essential that the substrate surfaces are correctly prepared prior to application. All substrates must be sound and free from contamination with oil, grease and other matter. Any oil or grease contamination must be removed completely by, scabbling or shot-blasting the contaminated areas to provide a clean substrate. Laitance should be removed by blasting, grinding, or light scabbling.

Concrete surfaces must be primed with **SpECtop Primer F1**. The primer must be allowed to become tack free before applying **SpECtop PE5**.

#### Steel

When applying to steel work, the surface should be cleaned to a bright metal finish by grit blasting to a bright metal finish. An angular profile amplitude of at least 75 microns is recommended. **SpECtop Primer F1** should be used prior to the application of **SpECtop PE5**.

## Asphalt

**SpECTop PE5** can be applied directly onto asphalt substrates without the need for primer. The asphalt, however should be at least 3 months old, clean, dry and sound. The asphalt should be lightly grit blasted to remove any weakly bonded or contaminated material to provide a sound substrate.

## Wood

Substrate must be clean, dry and dust free. No priming is required.

## Primer

Add the entire contents of the hardener can to the base can. Once mixed **SpECTop Primer F1** should be applied immediately as a thin continuous film using stiff brushes or rollers. Over application and puddles should be avoided. Porous substrates may require two or more coats. The primer should be allowed to become tack-free prior to the application of **SpECTop PE5**.

## Mixing

**SpECTop PE5** is a four part pre-weighed system ready for on site use. Mechanical mixing is essential and a drill and paddle type mixer is recommended. Add the entire contents of the hardener tin to the base tin and mix for 2-3 minutes using a slow speed drill fitted with a suitable mixing paddle until the mixture is homogeneous. Pour the mixed material into a 25 litre steel pail and slowly add the filler component whilst mixing. Mix for a minimum of 5 minutes.

## Application

**SpECTop PE5** should be poured onto the previously primed substrate and spread to the required thickness using a serrated steel trowel or squeegee. It is essential to spread the material in a uniform even application without over-working. **SpECTop PE5** may be rolled with a spiked roller to aid the release of trapped air. The surface dressing aggregate (**SpECTop Armourite Grain**) should be broadcast across the surface within 5 minutes of application.

**SpECTop PE5** should be left to cure for at least 24 hours @ 20 °C before all excess, unbound aggregate is brushed from the surface.

## EQUIPMENT CLEANING

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

Spillages should be absorbed with sand or clay based materials and disposed of according to local statutory regulations.

## PACKAGING & YIELD

**SpECTop PE5** slurry is supplied in a three part system with the following recommended coverage rates.

### SpECTop PE5 SLURRY

12 litre pack

@ 3.5mm wft: 0.286m<sup>2</sup>/litre

@ 4.0mm wft: 0.25m<sup>2</sup>/litre

@ 5.0mm wft: 0.2m<sup>2</sup>/litre

### SpECTop F1 Primer

5 litre or 1 litre pack @ 10-15m<sup>2</sup>/litre

### SpECTop Armourite Grain

25kg packs @ 2kg net/m<sup>2</sup>

## STORAGE & SHELF LIFE

12 months in unopened original packs stored under warehouse conditions.

## HEALTH & SAFETY

**SpECTop PE5** base/hardener and **SpECTop Primer F1** base/hardener should not come into contact with skin and eyes or be ingested.

Avoid prolonged inhalation of solvent vapours. Epoxy resins and hardeners may act as skin sensitisers. Gloves, goggles and barrier creams should be used. Ensure adequate ventilation and if working in enclosed areas wear suitable breathing apparatus.

**SpECTop PE5** contains phenolic materials of coal tar origin. Special care should be taken to avoid skin and eye contamination, with these materials.

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Any contamination should be removed immediately.

**FLAMMABILITY**

**SpECtop Primer F1** and **SpECtop Cleaning Fluid** are flammable. Do not expose to naked flame or other sources of ignition. Do not smoke. In the event of fire, extinguish with CO<sub>2</sub> or foam.

**FLASH POINT**

<b>SpECtop PE5</b>	>150 °C
<b>SpECtop Primer F1</b>	>60°C
<b>SpECtop Cleaning Fluid</b>	>40°C

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