

Product Data Sheet  
Edition 07.2008  
Identification No. F - 23



## KEMFLOOR ANTISTATIC

Seamless, Epoxy Based Anti-Static Flooring System

### Description

**KEMFLOOR ANTISTATIC** is a resin based antistatic floor system comprising a conductive under-coat topped with a 0.5 mm smooth finish epoxy floor surface with controlled electric properties. It has excellent adhesion to most building materials when PROSEALER SF is used as a solvent – free, low viscosity priming coat

### Where to use

KEMFLOOR ANTISTATIC is suitable for use in areas where a durable, cleaned, chemically resistance floor surface is required with the attendant risk of static building.

Typical areas of use are:

- Laboratories & Hospitals.
- Rooms containing electronic equipment.
- Chemical plants & explosive factories

### Advantages

- Negligible shrinkage.
- Excellent resistance to both chemical and mechanical attack.
- Eliminates static discharge from personnel and vehicles.

### Properties

Density	1.5± 0.1 gm/cm <sup>3</sup>
Surface finish	Glossy or matt
Pot life at 23°C	1 hour
Cure life at 20°C	15-20 hours.
Compressive strength	30-40 N/mm <sup>2</sup>
Flexural strength intension	20-25 N/mm <sup>2</sup>
Modulus of elasticity	4000N/mm <sup>2</sup>
Leakage resistance	<105 ohms
Chemical Resistance	Excellent resistance

### How to use

#### Surface Preparation

- All surfaces must be dry, clean and sound.
- All Contaminations, grease, oil and loose particles must be removed.
- Concrete surface must be free from laitance. Any approved mechanical method as sand blasting; scarifying can be used .Surface profile as (ICRI) standards.

#### Priming

- Apply a priming coat with a solvent free, low viscosity epoxy resin binder (PROPSEALER SF) by means of brush or roller avoiding puddles on the surface.
- Freshly applied PROSEALER SF should be protected from damp, condensation and water for at least over night.
- It is desirable that the freshly laid primer should be dusted with 0.5-0.8mm silica grains at the rate of 300 gm/m<sup>2</sup> to provide a good key for the topping.

#### Earthing

- it is also advisable to nail a thin wire screen or strips of copper 20 cm. long in the sub-floor and connected to a water pipe or any natural conductor.
- Two points suffice for a single room, one earth per 200 m<sup>2</sup> is also sufficient.
- The applicator must provide the possibility of connecting the flooring to an earth potential (see sketches).The earth concrete resistance of the earth connection must be <4 ohm.

#### Mixing and application of Conductive layer

- Prior to mixing, stir part A mechanically. when all of part B has been added to part A, mix continuously for three minutes with a low speed mixer until a uniform and homogenous mix has been achieved

- Since the cement mortar or concrete may exhibit poor discharge capacity after epoxy topping has been applied, it is advisable to apply a conductive layer using a graphite powder and silica sand as a filler to ensure that no gaps occur and impart to the primer a leakage resistance.
- Apply the mixed KEMFLOOR CONDUCTIVE coat over the whole area of the floor by roller, taking care to ensure good wetting of the surface and over coat as well the earthing wire screen or strips.
- The fully cured film must show a mat and even black appearance.

• Conductivity of KEMFLOOR CONDUCTIVE layer has to be tested and checked, prior to the application of the top coat

**Desired value: resistance to earth ( $> 1k \Omega - < 5 k \Omega$ )**

#### **Mixing and application of Top coating**

- Prior to mixing, stir part A mechanically, when all of part B has been added to part A, mix continuously for three minutes with a low speed mixer until a uniform and homogenous mix has been achieved
- The topping compound (KEMFLOOR AS) should be applied after the conductive layer has cured,
- Apply the top coat with a roller within the over coating time.
- Excessive thickness must be avoided since it causes reduced conductivity.
- Leave to full cure for 7 days.

#### **Cleaning**

Tools can be cleaned, providing the adhering has not already set, using special thinner.

#### **Theoretical coverage**

Sealer E43

0.2 - 0.3 kg/ m<sup>2</sup>

KEMFLOOR CONDUCTIVE

0.3 - 0.4 kg/m<sup>2</sup> (D.F. T 200 - 250 microns)

KEMFLOOR ANTISTATIC TOPCOAT

0.75 kg/m<sup>2</sup> (D.F. T. 500 microns)

#### **Packaging**

5, 10 kg for two components (A & B)

#### **Storage**

At least one year in manufacturer's undamaged, sealed containers in dry conditions, out of direct sunlight

## Health and Safety

This product is of low toxicity but normal precautions should be observed. Wear gloves, and if working overhead or spraying, wear goggles. Wash off any skin splashes with soap and water. Irrigating the eye with an eye bathing solution should treat eye contamination. Ensure adequate ventilation in confined spaces and use breathing aids. If ingested, drink milk or water and seek medical attention.

## Additional Information

PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure. PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range.

For our customer's satisfaction, PROKEM extends technical services to include after sales support to assist users in a proper handling of our products.