



# NanoCoat SF

Solvent free, epoxy resin coating

**Description** A high build solvent free, chemically resistant floor coating, available in either clear or an attractive range of colours, designed to seal, dust proof and protect concrete floors and other surfaces against the ingress of dirt, oil, grease and a wide variety of chemicals.

**Uses** The low odour and absence of solvent makes NanoCoat SF ideal for use in laboratories breweries, bakeries, public areas and food preparation areas, where non tainting is essential. NanoCoat SF may also be used as a sealer on resin based screeds where cleanliness is important or where particularly wet conditions are encountered.

**Advantages**

- NanoCoat SF is used to provide a protective coating to industrial & warehouse floors subject to light traffic, an oil resistant coating for bunded areas, a wall & floor coating in the food & other industries requiring high hygiene standards, and a protective coating in sewerage treatment plants.
- Improves working environment.
- Suitable for use in areas where solvents are undesirable.
- Hardwearing, durable and long lasting.
- Easily and quickly applied by unskilled labour.
- Easily cleaned hence reducing maintenance costs.
- Can be applied to damp substrates.
- Can be used as a curing agent.
- Good chemical resistance.
- Water based.
- Sewerage resistant.

**Chemical Resistance** Performance of NanoCoat SF tested by immersion at 20°C against a range of aggressive chemicals.

#### Acids

Hydrochloric Acid (Conc.)	Fair	Nitric Acid 25%	Good
Sulphuric Acid 50%	Good	Lactic Acid 10%	Good
Acetic Acid 10%	Fair	Citric Acid 20%	Good

#### Alkalines

Sodium Hydroxide 50%	Good	Ammonia 10%	Good
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#### Solvents

White Spirit	Good	Methylated Spirit	Good
Xylene	Good	Butanol	Good

#### Oils

Lubricating Oil	Good	Petrol	Good
Skydrol	Good		

#### Aqueous Solutions

Sodium Hypochlorite (Bleach)	Good	Sugar Solution (Saturated)	Good
Salt (Sodium Chloride Saturated)	Good	Ammonium Sulphate (10%)	Good

It should be noted that the ability of NanoCoat SF to resist attack is dependent on the temperature and concentration of the chemicals. If in doubt contact Nano Vision technical department.

### Properties

	@ 20°C
Pot life:	40 mins
Cure time:	24 hours
Maximum time between coats:	36 hours
Light traffic use after:	24 hours
Full traffic use after:	48 hours
Resistance to chemical spillage:	7 days
Compressive strength:	70 N/mm <sup>2</sup>
Flexural strength:	40 N/mm <sup>2</sup>
Tensile strength:	20 N/mm <sup>2</sup>
Water absorption: (ASTM C 413:1996)	0.06%
Shore D Hardness:(ASTM D 2240 : 1996)	85

**Packaging** 2.5kg & 3kg pack.



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## Storage

Store in dry and cool place below 35°C. Protect from direct sunlight.

## Shelf life

24 months if store properly in original unopened packaging.

## Instruction for use

### Surface preparation:

The surface to be treated should be dry, sound and free from loose materials. New concrete should be at least 28 days cured and have a moisture content of less than 5%. Damaged or worn areas should be repaired using NanoMortar FEP. Any laitance should be removed by physical methods or by acid etching. If the strength or the surface stability of the concrete base be in doubt, then we recommend a trial patch of NanoCoat SF be applied to assess its suitability. On highly polished/power floated floors, mechanical preparation or acid etching will be necessary.

### Priming:

Concrete should be primed with NanoPrimer. NanoPrimer should be mixed in the proportions supplied. Add the entire contents of the hardener can to the base can. When thoroughly mixed, preferably using a slow speed drill and paddle, the primer should be applied in a thin continuous film, using rollers or stiff brushes. Work the primer well into the surface of the concrete taking care to avoid ponding or over application. The primer should be left to achieve a tack-free condition before applying the top coat. A second coat of primer may be required if the substrate is excessively porous.

### Mixing:

The base and hardener components of NanoCoat SF should be thoroughly stirred before the two are mixed together. The entire contents of the hardener container should be poured into the base container and the two materials mixed thoroughly at least 3 minutes. The use of a heavy-duty slow speed, flameproof or air driven drill fitted with a Mixing Paddle is desirable. Mix these components in the quantities supplied taking care to ensure all containers are scraped clean.

### Application:

The first coat of NanoCoat SF should be applied using a good quality medium haired pile roller, suitable for epoxy application, or squeegee to achieve a continuous coating. Ensure that loose hairs on the roller are removed before use. A minimum film thickness of 200 microns should be applied. This can be increased where specifications demand. When the base coat has reached initial cure (12 hours @ 20°C or 5 hours at 35°C). The top coat can be applied by medium haired roller; at minimum film thickness of 200 microns. Care should be taken to ensure that a continuous film is achieved.

### Coverage:

NanoPrimer:	6-8 m <sup>2</sup> /litre
NanoCoat SF (base coat):	5.0m <sup>2</sup> /litre@200 microns wft
NanoCoat SF (top coat):	5.0m <sup>2</sup> /litre@200 microns wft

## Cleaning & disposal

NanoCoat SF should be removed from tools and equipment with NanoSolvent after use. Hardened material can only be removed mechanically. Do not dispose off into water or soil but according to local regulations.

## Health & safety

Ensure adequate ventilation and avoid inhalation of vapours. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves, and eye protection. If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provide additional skin protection. In case of contact with skin, rinse with plenty of clean water; then cleanse with soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately - do not induce vomiting.