

Nitoflor SL2000 UB

Heavy duty polyurethane based flow applied, 2mm thick floor topping

Uses

Nitoflor SL2000 UB is designed for application as a self levelling floor for concrete and other substrates. This system offers high resistance against impact, abrasion and chemicals.

Resistance to several organic chemicals used in the food industry makes the system suitable for use in various food processing industries. Nitoflor SL2000 UB is ideal for use in:

- Bakeries & confectionery industries
- Pharmaceutical industries
- Textile manufacturing areas

Advantages

- Excellent mechanical properties
- High impact and abrasion resistance
- Good resistance to a wide range of chemicals

Description

Nitoflor SL2000 UB is a polyurethane based self levelling system designed for application depth of 2mm. The system is formulated specifically to withstand thermal shocks, freeze/thaw cycles and chemical attack. The product is supplied as a four-component system (including colour pack), pre-weighed for on-site mixing.

Properties

Pot Life	@ 25°C	@35°C
Nitoflor SL2000UB	: 45 min	20 min
Cure time-		
Foot traffic	: 24 hours	16 hours
Vehicular traffic	: 48 hours	36 hours
Chemical resistance	: 7 days	4 days

Note : 1 . Nitoflor SL2000UB should not be installed at temperature below 10°C.
2. If the installed temperature is between 10-25°C, please consult Fosroc Technical before allowing any traffic.

Compressive strength @ 7 days (BS 6319) part 2	: >65 N/mm ²	>65 N/mm ²
Flexural strength @ 7 days (BS 6319) part 3,	: > 28 N/mm ²	> 28 N/mm ²
Tensile strength @ 7 days (BS 6319) part 7	: > 15 N/mm ²	> 15 N/mm ²
Mixed Density	: 1.75 +/- 0.05 g/cc	

Chemical resistance

Nitoflor SL2000 UB will resist spillage of the following chemical solutions at 25°C:

Inorganic

Sodium Hydroxide 40%, Sodium Chloride (sat.) Chlorine water

Organics

Glucose syrup (sat), Sugar solution (sat), Citric acid (10%), Tartaric acid (10%) Nicotinic acid (10%)

Alcoholic beverages

Wine, Brandy, Beer

Carbonated beverages

Pepsi / Coca Cola, Mirinda / Fanta, 7 UP / Team

Electrochemical solutions

Copper Sulphate 1M
Zinc Sulphate 1M

Fruit juices

Grape juice, Orange juice, Fruit cocktail, Apple juice Mango juice, Pineapple juice, Lemon juice

Fats

Vegetable Oil, Cheese, Butter

Sea Food

Fish (varieties), Prawns (varieties), Fish liquid, Fish blood Processed fish oil

Poultry

Chicken, Egg (yolk + white)

Meat

Beef, Sheep blood

Fuels

petrol, Diesel, Engine oil, Hydraulic oil, Brake fluid Coolant

Cleaning Aids

Dishwashing liquid, Clorox, Jiff, Commercial detergents

Note : The local Fosroc office should be consulted for additional chemicals, different concentrations or operating temperatures greater than 25°C.

All the above properties have been determined by laboratory controlled tests and success in use will be determined by the implementation of good housekeeping practices.

Nitoflor SL2000 UB

Instructions for use

Surface Preparation

The long term durability of any resin floor system is determined by the adhesive bond achieved between the flooring material and the substrate. It is most important therefore that substrates are correctly prepared prior to application.

Any damaged areas or surface irregularities should be repaired using one of the Nitoflor EU range of products.

Nitoflor or SL2000 UB should be applied by specialist contractors who must follow the procedures laid down in the Product Application Guide. Fosroc works with a network of such applicators who have been trained in the correct installation procedures. The following steps are involved in the application which would normally take place over a 2 to 3 day period.

- Thoroughly prepare the floor surface. Correct surface preparation helps to achieve the necessary adhesive bond between the substrate and the new floor.
- All existing expansion or movement joints should be followed through the new floor surface. Joints should be cleaned.
- Apply Nitoprime 25 and allow to cure for 12 hours at 20°C or 8 hours at 35°C.
- Apply the Nitoflor SL2000 UB topping. The material is poured on to the primed surface and spread with a notched steel trowel to achieve a 2-3 mm seamless topping.
- Using a spiked roller, remove air entrainment and allow to cure.
- Install the most appropriate Fosroc joint sealant. This will depend on the anticipated movement accommodation factor and the end use of the new floor. For further advice, consult the local Fosroc office.

Mixing

Nitoflor SL flooring is supplied in four pre-weighed packs (base, hardener, aggregate and colour pack) which are ready for immediate on-site mixing. Part mixing of these components is not acceptable and will affect both performance and appearance of the finished floor.

Mixing should be carried out using either a forced action mixer; or a heavy duty, slow-speed drill fitted with mixing paddle. All such equipment should be of a type and capacity approved by Fosroc. The components should be mixed in a suitably sized mixing vessel.

The colour pack should be added to the base container and mixed for 15-30 seconds, until homogeneous. Then add the hardener and mix for further 30 seconds, until an even colour and texture is obtained.

Thereafter, the contents of the graded aggregate pack should be slowly added and mixing carried out for a further 3 minutes until a completely homogenous material is obtained

Application

The applicator should ensure that there are sufficient supplies of plant, labour and materials to make the mixing and subsequent application process a continuous one for any given, independent floor area.

Once mixed, the material must be used within its specified pot life - see "Properties" section.

The material should be poured onto the prepared and primed substrate as soon as mixing is complete. It should be spread to the required thickness using a serrated trowel; with care taken not to overwork the resin, spreading evenly and slowly. Immediately after laying, the material should be rolled, using a spiked nylon roller, to remove slight trowel marks, and to assist air release. The rolling should be carried out using a 'back and forth' technique along the same path. An overlap of 50% with adjacent paths is recommended.

Further light rolling may be required to remove surface imperfections, or for subsequent release of trapped air, but should be prior to the setting of the product.

Floor Joints

All existing expansion or movement joints should be followed through the new floor surface. Joint sealant & joint geometry should be compatible with the floor type used, intended exposure conditions and likely movement characteristics of the substrate - consult the local Fosroc office for more details.

Cleaning

Nitoprime 25 and Nitoflor SL2000 UB should be removed from tools and equipment with Nitoflor Sol immediately after use. Hardened material can only be removed mechanically.

Maintenance

The service life of a floor can be considerably extended by good housekeeping. Regular cleaning may be carried out using a rotary scrubbing machine with a water miscible cleaning agent at temperatures up to 100°C.

- Nitoflor SL2000 UB should not be applied on to sur



Nitoflor SL2000 UB

faces which are known to, or likely to suffer from, rising dampness, potential osmosis problems or have a relative humidity greater than 75% as measured in accordance with BS 8203 Appendix A or Thermo-hygrometer.

- Fosroc does not recommend acid etching as a method of floor preparation. If used, the method should be approved by the project consultant.
- Nitoflor SL2000 UB should not be applied to asphalt, weak or friable concrete, unmodified sand/cement screeds, PVC tiles or sheet.
- Nitoflor SL2000 UB should not be installed at temperatures below 10°C or above 35°C. Not suitable for use at temperatures below -5°C.
- Nitoflor SL2000 UB is subject to colour change when in contact with oxidising acids.

Technical support

Fosroc offers a comprehensive range of high performance, high quality flooring, jointing and repair products for both new and existing floor surfaces. In addition, the company offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance in locations all over the world.

Estimating

Supply

Nitoflor SL2000 UB	: 15 litre packs
Nitoprime 25	: 1 and 4 litre packs
Nitofl or Sol	: 5 litre can

Coverage

Nitoflor SL2000 UB	: 7.5 m ² /pack @ 2mm thickness
Nitoprime 25	: 4 - 5 m ² /litre

Note: The coverage figures given are theoretical - due to wastage factors and the variety and nature of possible substrates, practical coverage figures will be reduced. Typically an additional 10% should be allowed for surface irregularities and wastage although this will vary with site conditions.

Storage



Shelf life

All products have a shelf life of 12 months if kept in a dry store in the original, unopened packs.

Storage conditions

Store in dry conditions between 5°C and 30°C, away from sources of heat and naked flames, in the original, unopened sources of heat and naked flames, in the original, unopened packs. If stored at high temperatures the shelf life will be reduced.

Disposal

Spillages of component products should be absorbed onto earth, sand or other inert material and transferred to a suitable vessel. Disposal of such spillages or empty packaging should be in accordance with local waste disposal regulations.

For further information, refer to the Product Material Safety Datasheet.

Precautions

Health and safety

Nitoflor SL2000 UB Nitoprime 25 and Nitofl or Sol should not come into contact with the skin and eyes, or be swallowed. 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.

Fire

Nitofl or SL2000 UB and Nitoprime 25 are non-flammable. Nitoflor Sol is flammable. Keep away from sources of ignition. No smoking. In the event of fire extinguish with CO² or foam. Do not use a water jet.

Flash Point

Nitoflor Sol : 33°C

Additional Information

Nitoflor SL2000 UB

Fosroc manufactures a wide range of complementary products which include :

- waterproofing membranes & waterstops
- joint sealants & filler boards
- cementitious & epoxy grouts
- specialised flooring materials

Fosroc additionally offers a comprehensive package of products specifically designed for the repair and refurbishment of damaged concrete. Fosroc's 'Systematic Approach' to concrete repair features the following :

- hand-placed repair mortars. Do not use a water jet. spray grade repair mortars
- fluid micro-concretes
- chemically resistant epoxy mortars
- anti-carbonation/anti-chloride protective coatings
- chemical and abrasion resistant coatings

For further information on any of the above, please consult your local Fosroc office - as below.



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Important note :

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard terms and conditions of sale, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation specification or information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products whether or not in accordance with any advice, specification, recommendation or information given by it.

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