

Nitoflor Lithurin (M)

Hardening and dust proofing compound for concrete surfaces

Uses

Use as a surface hardener for new and old concrete floors to prevent dusting and to increase durability. Suitable for use in concrete and granolithic surfaces.

Typical applications include:

- Warehouses
- Old dusty concrete floors
- Sealer for new concrete surfaces
- Hardener for pre-cast products.

Advantages

- Highly durable, improves abrasion resistance and reduces chemical attack from oils and greases.
- Extend the durability of the floor.
- Eliminates dust formation from within the treated surface.
- Easy to apply. No special equipment or skills required.
- Economical and low cost method of floor protection.
- Reduces maintenance cost for flooring.

Description

Nitoflor Lithurin (M), a clear liquid based on sodium silicate solution. The material is mixed with water and 1:1 dilution and applied to concrete surfaces by spray, squeeze, broom or mop. The solution penetrates into the concrete and reacts with the cementitious components leaving a permanent, hard wearing and dust free surface.

Properties

Penetration: Nitoflor Lithurin (M) is penetrative resulting in a more durable finish better than that of other surface treatments, which merely form a superficial skin.

Hardness: The surface hardness is achieved through a chemical

reaction within the cementitious material.

Anti-dust : The chemical elimination of free lime and other soluble particles creates a tightly bound surface resistant to dusting.

Chemical resistance : Nitoflor Lithurin (M) application reduces the absorbency of the surface and improves resistance to solvents, greases and commonly used chemicals.

Consult the Fosroc technical service department for details on resistance to specific chemicals.

Instructions for use

Preparation

Surfaces to be treated with Nitoflor Lithurin (M) must be structurally sound and free from loose materials. Cracks or holes can be repaired using a recommended Fosroc repair material that should be allowed to cure prior to proceeding. Oil and grease contaminated surfaces should be treated with a suitable chemical de-greaser followed by washing with clean water and allowed to dry.

Any laitance or existing coating must be removed prior to application, as these will prevent the Nitoflor Lithurin (M) from penetrating. New concrete floors must be allowed to cure for 14 days prior to treatment.

In cases where concrete surfaces are very old and dusty, dilution of Nitoflor Lithurin (M) at 1:1 ratio with water is recommended as a first coat so as to allow the low viscosity solution penetrates into the pores of the concrete and get absorbed. Subsequent coats without dilution are required.

Coloured floors should be allowed to cure for 28 days prior to treatment and a small area tested with Nitoflor Lithurin (M) to assess the effect on the colour. Nitoflor Lithurin (M) must only be applied to dry surfaces to maximise penetration.

Nitoflor Lithurin (M)

Application

Ensure that the surface to be treated is dry and apply the mixed Nitoflor Lithurin (M) at a rate of approximately 1 litre to every 10m² using a soft broom or brush. Allow the solution to be absorbed into the floor for a period of up to 2 hours, any solution not absorbed after this period should be removed. Failure to do so will result in the formation of a weak, glossy surface film following the drying. Normally a two or three coat application is recommended for complete treatment, however, very dense, well-trowelled surfaces such as granolithic toppings, power floated or vacuum dewatered concrete will generally require only a single coat. If a second application is necessary, reapply the solution after 24 hours ensuring that the floor is dry. All surplus solution must be removed as stated previously. The same procedure will apply for a third application if required.

Under no circumstances should the material be allowed to puddle as this will result in the formation of silicate that is difficult to remove or wash down with water.

A slight sheen may appear after the application of Nitoflor Lithurin (M). Areas treated with Nitoflor Lithurin (M) can be opened to traffic after the material dries completely without any tackiness. This will normally take 24 hours after the final coat applied.

Any subsequent coating such as over coating with paints, topping, tiles etc must first be evaluated by removing the sheen. Consult Fosroc for advice.

Technical support

Fosroc offers a comprehensive range of high performance, high quality flooring, joining and repair products for both new and existing floor surfaces. In addition Fosroc also offers technical support service to specifiers, end users and contractors. It is also able to offer on-site technical assistance, an AutoCAD facility and dedicated specification assistance in locations all over the world.

Estimating Supply

Nitoflor Lithurin (M) is available in liquid form.

Nitoflor Lithurin (M) : 20 litre pails

Coverage

The following coverage figures are based upon coverage rates on a smooth surface. Typically an additional 10% should be allowed for surface irregularities and wastage. This will vary with site conditions.

Nitoflor Lithurin (M):

Liquid form

5.0 m²/ litre of liquid for 3 coats

7.5 m²/ litre of liquid for 2 coats

10.0 m² / litre of liquid for 1 coat

Storage

Shelf Life

Nitoflor Lithurin (M) has a shelf life of 6 months when stored in dry warehouse conditions between 10°C and 30°C.

Precautions

Health and safety

Nitoflor Lithurin (M) is non-toxic. General good housekeeping is required. Wash accidental skin splashes as they occur. Wash hands thoroughly with soap and water after work. Eye contamination should be washed immediately with clean water and sought medical treatment. If swallowed, do not induce vomiting, seek immediate medical treatment.

Fire

Nitoflor Lithurin (M) is non-flammable.

Disposal

Spillages should be absorbed onto earth, sand or other inert material and transferred to suitable vessel. Disposal of such spillages or empty packaging should be in accordance with Local Waste Disposal Authority regulations.