

Fosroc® Nitoflor LH

High performance lithium based hardener, strengthener and densifier for concrete floors

Uses

Nitoflor LH is used for surface hardening of new and old concrete to prevent dust generation and to reduce wear, particularly on exposed concrete. Typical areas of application include warehouses, factories, platforms, car parks, corridors etc., on both new and existing concrete surfaces.

Advantages

- **ASR Protection** – contains Lithium, the chemical element known to mitigate damaging ASR (Alkali-silica reactivity)
- Seals micro-channels in concrete against water penetration and chemical attack
- **Hardens** – making concrete stronger and abrasion resistant
- **Dust proofs** – creating a cleaner, healthier environment
- **Permanent** – One penetrating application
- **Easy maintenance** – Makes cleaning easier. Reduces staining,
- Satin Sheen to concrete
- **Stable** – in wet environment
- **Better** – penetration over Sodium based systems

Description

Nitoflor LH is a lithium silicate based system which when applied on concrete surfaces penetrates into the micro channels and seals against water and chemical attack and improves abrasion resistance.

Technical support

Fosroc offers a comprehensive range of floor toppings and coatings. In addition, Fosroc offers technical support service to specifiers, end users and contractors, as well as on-site technical assistance in locations all over the country.

Compatibility with cement types

Nitoflor LH is suitable for use on concrete made with all normal OPC and PPC cements. However, where high pozzolanic content cement is employed, free lime may be low and the use of other Nitoflor toppings may be preferable. Fosroc shall be consulted for advice in case of doubt.

Anti-dust

The main source of dust, from otherwise sound concrete floors, is the liberation of free lime which has not been converted fully into the hydration process. By converting this free lime into a hard crystalline material, this source of dust is eliminated. At the same time, the resistance of the concrete surface to penetration of oil and grease is considerably increased.

Supplier Specification

The surface hardening of new and old concrete (specify details and areas of application) must be carried out using Nitoflor LH marketed by Fosroc, applied strictly in accordance with the technical datasheets.

Application instructions

Preparation

The substrate shall be thoroughly cleaned of all foreign materials such as bond breakers, curing agents, form release oils, dust, and construction laitance by light mechanical grinding if required. Clean the surface with a high pH detergent and wash thoroughly. The surface shall be saturated with water and later excess water has to be removed.

Application

A low pressure, high volume sprayer shall be used to apply Nitoflor LH so as to form a glistening sheen and to ensure complete saturation of the surface. Enough Nitoflor LH shall be applied to keep the surface wet for at least 20 minutes.

If applying by hand, spread the sprayed material with a lambs wool roller once or twice and then stop spreading. If spread excessively, it tends to dry in streaks. After 20 minutes, the excess material shall be removed and the surface shall be allowed to dry for 1 – 2 hrs. The floor is ready to use after the surface is dry. A light lithium residue may form on the surface after the floor is dry. This is the excess Nitoflor LH liquid floor hardener which was not absorbed and can be removed by a stiff broom or power sweeper.

For an immediate shine, Nitoflor LH shall be allowed to dry overnight and then polished with high speed buffer equipped with a black pad, followed by red pad.

Fosroc® Nitoflor LH

Sealing / overcoating / striping

Concrete floors treated with Nitoflor LH can be sealed / over coated with Nitoflor epoxy floor coatings after 24 hours. The treated surface can also be painted for striping as there will be no chemical incompatibility between Nitoflor LH treated surface and these paints.

Maintenance

Floors treated with Nitoflor LH benefit from good routine maintenance. Regular scrubbing with a high pH detergent is recommended and can increase the shine. Tires marks can be removed with a citrus type of cleaner. Oils and acids should be removed properly to prevent damage.

Chemical Resistance

Concrete treated with Nitoflor LH reduces absorbency of the concrete and improves chemical resistance from compounds such as solvents, grease and low concentration acids. Extreme or prolonged exposures, especially to acids, may eventually cause some damage to concrete. However, concrete treated with Nitoflor LH will be more resistant to staining.

Estimating

Packaging

Nitoflor LH is supplied in 20 & 200 liters containers.

Coverage

3-5m² per liter on power troweled surfaces. On textured surfaces the coverage will be much lower. Actual coverage can vary depending on floor surface conditions.



Fosroc International

Malaysia

Fosroc Sdn. Bhd

Tel : +60 3 5102 5660

Enquiry**malaysia@fosroc.com**

Thailand

Fosroc Thailand

Tel : +66 2 136 9898

Enquiry**thailand@fosroc.com**

Indonesia

PT. Fosroc Indonesia

Tel : +62 21 897 2103

Enquiry**indonesia@fosroc.com**

Vietnam

Fosroc Vietnam

Tel : +82 222 3765 971

Enquiry**vietnam@fosroc.com**

Singapore

Fosroc Singapore

Tel: +65 6665 3828

Enquiry**singapore@fosroc.com**

Rest of Southeast Asia

Fosroc Construction Chemicals Pte Ltd

Tel : +65 6665 3828

Enquiry**.FGTAsia@fosroc.com**

Storage

Shelf life

12 months if stored in a cool dry place in unopened packages.

Precautions

Health & safety instructions

Nitoflor LH is non-flammable and non-toxic water based formulation. It contains no solvents, or harmful levels of VOCs. It is not carcinogenic or mutagenic and may be used in food preparation areas. Nitoflor LH is odourless during and after application and also allows concrete to breathe.

Fire

Nitoflor LH is non-flammable.

Additional information

Technical data and guidance can be provided on a wide range of concrete admixtures, concreting aids, waterproofing and other materials including floor sealers / toppings, repair system and industrial machinery grouts.

Separate datasheets are available on these products,

Important note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification of 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 of information given by it.