

# Nitoflor Lithurin

## Liquid floor hardener / dustproofer

### USES

Nitoflor Lithurin is used as a premixed liquid surface hardener for new and old concrete to reduce dusting, minimise wear and help reduce attack by certain chemicals.

Used in all areas of the manufacturing industry and general warehousing to improve the durability and wear resistance of concrete or granolithic surfaces, e.g. light engineering works, warehouses, loading bays, car parks, abattoirs, tanks, silos, dams, etc.

### ADVANTAGES

- Easy and economical to apply
- Retards penetration of water, oils and grease
- Improves abrasion and wear resistance of concrete
- Chemical reaction eliminates dusting of treated concrete substrates
- Successfully proven and applied over 50 years
- No pre-mixing required

### DESCRIPTION

Nitoflor Lithurin is a water based solution of silicofluorides with wetting and penetrative agents to assist absorption and penetration. Coloured pink with fugitive dye for ease of identification.

### TECHNICAL SUPPORT

Parchem 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.

### DESIGN CRITERIA

Nitoflor Lithurin is applied in two or three saturation coats.

New concrete floors should be at least 14 days old before treatment.

Coloured floors should be at least 28 days old and a small test area treated to check the effect on the colour.

Nitoflor Lithurin may only be applied to sand/cement screeds which are not leaner than 1:3 cement/sand ratio.

### PROPERTIES

pH:	2 - 3
Specific gravity:	1.10 - 1.11 at 25°C

### METHOD OF ACTION

Dusting due to continuous traffic on concrete floor surfaces is a widespread problem in industrial environments. The constant wearing away of the cement matrix leads eventually to loosening of the larger aggregate in the concrete surface. This can lead to floors which are not only unsightly but can be very dangerous to people and property. Nitoflor Lithurin acts in two ways to reduce the dusting of the cement matrix and so improve the durability of the concrete floor.

The specially selected wetting agents ensure deep penetration into the substrate. Secondly the silicofluorides in Nitoflor Lithurin react chemically with the free lime in the cement paste (which being relatively soft, dusts under abrasive wear).

The hard products of this chemical reaction are permanently bound into the matrix of the floor surface giving a durable, hard-wearing and dust free surface.

This chemical reaction case hardens the substrate to a depth of several millimetres providing a surface which is far more resilient than other 'chemical hardeners' (e.g silicates) which merely form a skin on the surface.

### EXPECTED LIFE

The Nitoflor Lithurin treatment lasts the life of the floor and re-treatment should never be required.

## CHEMICAL RESISTANCE

By producing a dense, non-porous surface concrete floors treated with Nitoflor Lithurin show improved resistance to oils, grease and many commonly used chemicals.

## APPLICATION INSTRUCTIONS

### PREPARATION

Surfaces to be treated should be structurally sound. Cracks and holes can be repaired using one of the Parchem's repair materials. Consult your local Parchem sales office for advice.

Localised contamination of oil and grease must be removed.

Surfaces should be dry to allow maximum penetration.

Any surface treatments such as old coatings, curing compound residues, excessive laitance which would prevent penetration should be removed before treatment with Nitoflor Lithurin. Note: Lithurin cannot be applied over curing compounds.

### APPLICATION

Pour or flush on Nitoflor Lithurin to a thoroughly clean and dry floor. Spread using a long handled broom.

Maintain a shining wet surface brooming out any pools on low areas to high spots to ensure even penetration. When complete absorption has occurred remove all surplus liquid immediately from the floor.

Allow first coat to cure and dry at least 24 hours before applying second coat. Two saturation coats are usually sufficient. However, for maximum effect on doubtful surfaces a third is recommended.

### CLEANING

Clean all equipment in fresh water immediately after use.

### LIMITATIONS

Remove any splashes on metals, glass, paint, bricks, furniture or fittings, etc. immediately with water. The treated concrete floor may have a whitish surface appearance which will wear off under normal use. Where such an appearance may be objectionable apply a small test area of Nitoflor Lithurin for approval prior to proceeding.

Do not apply Nitoflor Lithurin to concrete floors with metallic floor hardeners as excessive rusting will result.

## ESTIMATING

### SUPPLY

**Nitoflor Lithurin:** 20 litre plastic drum

### COVERAGE

**Nitoflor Lithurin:** 4 - 6 m<sup>2</sup>/litre per coat

Coverage varies with the absorbency of the substrate - figures quoted are typical for a smooth trowelled finish.

## SPECIFICATION CLAUSE

The floor areas (specify) shall be treated with two saturation coats of Nitoflor Lithurin in accordance with the manufacturers application instructions.

## STORAGE

Nitoflor Lithurin has a shelf life of 24 months in original packaging if container is air tight, acid resistant plastic. Never use metallic containers.

Nitoflor Lithurin must not be stored in freezing conditions or exposed to direct sun light.

## IMPORTANT NOTICE

A Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the MSDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

## PRODUCT DISCLAIMER

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

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