



# STERLING<sup>®</sup> TechnoSeal<sup>®</sup> Sethard L

High-Performance Liquid Densifier, Sealer and Dustproof for concrete Floors.

The Specialist Construction Chemical Company

## Description:

TechnoSeal<sup>®</sup> Sethard L is a water-based concrete densifier based on innovative lithium silicate technology. It is a non-film forming penetrating sealer that penetrates, blocks concrete capillaries and reacts with concrete to form a hard, dust-proof and colour enhanced concrete finish. A smooth or gloss finish can be easily achieved by concrete polishing.

Due to the smaller molecule and high activity of lithium silicate technology, TechnoSeal<sup>®</sup> Sethard L can deeply penetrate and quickly react with concrete resulting in fast concrete polishing process. Further, unlike other silicate densifiers, TechnoSeal<sup>®</sup> Sethard L is unlikely to leave visible residues or efflorescence after the treatment

## Application Includes:

TechnoSeal<sup>®</sup> Sethard L is 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:

- Horizontal old or new concrete surfaces, where a hard surface with light to moderate abrasion resistance is required e.g. warehouses, industrial plants, stores, shopping malls, parking structures, service stations, hangars etc.
- On concrete slabs where no specific curing efficiency or standards are required
- Suitable for interior or exterior applications
- Dust-proofing of prefabricated concrete elements
- Suitable for protection against ingress (Principle 1, method 1.2 of EN 1504-9)

\* TechnoSeal<sup>®</sup> Sethard L may only be used by experienced professionals.

## Features:

- ASR Protection - contains Lithium, the chemical element known to mitigate damaging ASR (Alkali-silica reactivity)
- Hardens - making concrete stronger and abrasion resistant
- Dust proofs - creating a cleaner, healthier environment
- Permanent - Permanent treatment that never peels off
- Easy maintenance. Makes cleaning easier. Reduces staining.
- Seals micro-channels in concrete against water penetration and chemical attack
- Superior in performance over Sodium based systems
- Water-based, low VOC

## Instructions for Use

### Surface Preparation:

Surfaces to be treated with TechnoSeal<sup>®</sup> Sethard L must be structurally sound and free from loose materials. Cracks or holes can be repaired using a recommended Sterling Technotrade 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 TechnoSeal<sup>®</sup> Sethard L from penetrating. New concrete floors must be allowed to cure for 28 days prior to treatment. Coloured floors should be allowed to cure for 28 days prior to treatment and a small area tested with TechnoSeal<sup>®</sup> Sethard L to assess the effect on the colour. TechnoSeal<sup>®</sup> Sethard L must only be applied to dry surfaces to maximise penetration.

### Application

Ensure that the surface to be treated is dry and apply the mixed TechnoSeal<sup>®</sup> Sethard L at a rate of approximately 1 litre to every 5m<sup>2</sup> using a soft broom or brush. Allow TechnoSeal<sup>®</sup> Sethard L 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 if a second application is necessary, reapply the TechnoSeal<sup>®</sup> Sethard L after 24 hours ensuring that the floor is dry. All surplus material must be removed as stated previously. The same procedure will apply for a third application. 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 TechnoSeal<sup>®</sup> Sethard L.

Areas treated with TechnoSeal<sup>®</sup> Sethard L 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.

### Typical Properties at 20°C

Appearance	Clear, thin liquid
Specific Gravity	1.10
pH	≥11.0
Density	(1.1 kg/L)
VOC Content	5 g/L
Abrasion Resistance (ASTM C779)	45 % improvement
Hardening Test (ASTM C39)	46% improvement
Hardness Test (Moh's Scale Test)	40% improvement
Relative Air Humidity	80 % max.
Open to pedestrian traffic	8 hours
Full curing	7 days
*All values are subject to 5-10 % tolerance	

## Shelf Life

TechnoSeal® Sethard L has a shelf life of 12 months when stored in dry warehouse conditions between 10°C and 30°C. Extreme temperature, excessive humidity and over exposure to UV will result in the reduction of shelf life.

## Packaging

TechnoSeal® Sethard L is supplied in 20 litre pails & 200 litre HDPE barrels.

## Technical support

Sterling Technotrade offers a comprehensive range of high performance, high quality flooring, joining and repair products for both new and existing floor surfaces. In addition Sterling Technotrade also offers technical support service to specifiers, end users and contractors.

## Fire

TechnoSeal® Sethard L is non-flammable.

## Storage

Store in dry conditions between 10°C and 30°C, away from sources of heat and naked flames, in the original, unopened packs. If stored at high temperatures the shelf life will be reduced.

## Cleaning

Tools and equipment should be cleaned with water after use. Spillages should be absorbed with sand or sawdust and disposed of in accordance with local regulations. Hardened materials should be removed mechanically.

## Additional information

Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd -The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

\*Separate datasheet are available on these products.

## 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.

Approximate coverage of TechnoSeal® Sethard L for estimating purpose is:

- 5.0 m<sup>2</sup>/ litre of liquid for 3 coats
- 7.5 m<sup>2</sup>/ litre of liquid for 2 coats
- 10.0 m<sup>2</sup> / litre of liquid for 1 coat

## Limitations

- Do not use sprayers which have previously been used for spraying silicones or release agents (oils).
- In hot weather (above +25 °C) store TechnoSeal® Sethard L in a cool place prior to use.
- At low temperatures (below +10 °C) the product may thicken and be difficult to spray.
- Ensure spraying equipment is cleaned thoroughly prior to use and any residues of previous membranes are removed.
- TechnoSeal® Sethard L must be treated mechanically (from light to heavy shot blasting depending on the depth of the penetration) prior to the application of a coating system.
- Immediately wash over-spray from glass, aluminium or highly polished surfaces with water to avoid etching of surfaces.
- Do not use on substrates treated previously with curing agents, membrane forming sealers or asphalt until these layers have been removed completely.
- Only use as curing compound for unregulated specification application.
- Gelification time may be increased at low temperatures (below +10 °C), high humidity (from 80 % to 100 %) or wind free conditions.
- In hot weather conditions (above +25 °C), gelling may occur before material has penetrated sufficiently. In such case, apply additional TechnoSeal® Sethard L to keep the surface wet for the recommended 30 minutes.
- When applying, leave no dry spots in order to have homogenous performance. Touch up where necessary.

**DISCLAIMER:** The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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