

**TECHNICAL
DATA SHEET**

NuCoteTM SL Underlayment
Self-Levelling Underlayment

PRODUCT DESCRIPTION

NuCote SL Underlayment is a self-levelling, single component, high performance, cementitious underlayment compound which will be covered with vinyl, carpet, tile or resin flooring. **NuCote SL Underlayment** has been specially formulated to produce a hard wearing, smooth, crack free, flat surface while being very easy to apply.

ADVANTAGES

- Dimensionally stable.
- High flow properties.
- Self-healing properties up to 15 minutes.
- Single component product.
- Applied directly onto prepared surface.
- Self-levelling compound
- Trafficable within a few hours.
- Non-toxic.

APPLICATION AREAS

- Underlayment for floor coverings such as carpets, ceramic tiles, vinyl, parquet, resins, etc
- Refurbishing of old concrete floors.
- Levelling of existing floors.
- Hygiene applications such as hospitals, food preparation and storage areas.

TECHNICAL DATA

DESCRIPTION	RESULTS
Compressive Strength DIN EN 13892-2	> 15 MPa (1 Day) > 40 N/mm ² (28 Days)
Flexural Strength DIN EN 13892-2	5 – 9 N/mm ² (28 Days)
Shrinkage EN 13872	< 0.5 mm/m
Bond strength DIN EN 13892-8	≥ 1 N/mm ²
Abrasion Resistance	250 mm ³
Setting Time EN 13454-2	± 4 Hours (Initial Set) ± 4 Hours 30 Minutes (Final Set)
Approximate Coverage	1.8 kg/m ² / 1 mm thickness (25 kg bag will cover ± 6 m ² @ 3 mm thickness)

Note: The above results were obtained under normal laboratory conditions.

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PACKAGING

NuCote SL Underlayment is available in 25 kg bags.

STORAGE AND STABILITY

NuCote SL Underlayment has a shelf life of 12 months when stored in the original containers in a cool, dry place, away from direct sunlight. Failure to do so will result in a reduction of shelf life.

SURFACE PREPARATION

Concrete substrate must be structurally sound. Remove all oil, grease, paint, corrosion, dust and surface deposits. This can be done by wire brush, grinding or sand blasting. Ensure the surface is dry or prime with **NuCote MT Primer** or **NuCote GP Primer** to improve the bond.

SUBSTRATE REQUIREMENTS

Concrete substrates to be of a good wood float finish or a steel floated finish with a minimum compressive strength of 25 MPa and 1.5 MPa in tensile adhesion strength. The surface must be laitance free with no dust of loose materials. The moisture content should always be monitored and be less than 5 % with no rising damp. Ensure DPM's are placed under the concrete screeds.

Before carrying out any work, the concrete substrate should be tested to determine the moisture vapour emission rate (MVER) according to test method ASTM F1869 or internal relative humidity (IRH) according to test method ASTM F2170 or use any approved and reliable substrate moisture testing equipment. For concrete slabs with an MVER of less than 5 lbs/1 000 ft²/24 hrs, use **NuCote GP Primer** one coat at 200 µm wet film thickness for resinous floors. If the MVER is over 5 lbs/1 000 ft²/24 hrs use **NuCote MT Primer** one coat at 200 µm followed by another coat of **NuCote Moisture Barrier Primer** with scatter aggregates (whenever scatter aggregates are specified

PRIMING

Prime the concrete surface as per our specification with the relevant specified primer. Alternative primers are offered depending on the requirements of the substrate and environment as well as site conditions. The **NuCote GP Primer**, **NuCote NuCem Primer** or **NuCote MT Primer** are the most common primers. Scatter aggregates must be applied on the primer before laying **NuCote SL Underlayment**. Allow to cure overnight or for at least 12 hours prior to overcoating. Maximum overcoating time of 48 hours else preparation needs to be redone to ensure a chemical and mechanical bond. Ensure application conditions are between 15 and 30°C. Should the temperature increase, an accelerated reaction can be expected.

LIMITATIONS

- Do not use **NuCote SL Underlayment** at temperatures below 15°C. Avoid excessive heat (above 30°C).
- Slab temperature: 15 - 30°C
- NuCote SL Underlayment** cannot be reworked by later addition of water.
- Foot traffic is allowable in approximately 1 hours.
- Application thickness: 3 - 10 mm.
- Floor covering installation: After 24 hours, depending on thickness and ambient conditions.
- NuCote SL Underlayment** is only suitable as an underlayment application. If a durable floor covering is not going to be installed over the system, then a protective coating must be applied over the cured product.

MIXING

- Mix with a mechanical low speed mixer (maximum of 600 rpm).
- Mixing water temperature: 15 - 25°C
- It is important that the water/powder ratio is strictly adhered to.

SET TIMES

Water addition	5 L per 25 kg
Initial Set	4 Hour
Final Set	4½ Hours

CLEANING

Clean hands and skin immediately after use with industrial hand cleaner. Clean tools and equipment immediately after use with tap water.

DISCLAIMER

These products are sold according to our standard terms and conditions of sale which is available on request and may not be overridden by any other legal documentation. Whilst the information contained herein is true, accurate and represents our best knowledge, the user must contact **NuCote** immediately should any complications occur. Site conditions, labour and application issues are out of our control and the contractor holds this liability.

Figures for consumption are estimates and theoretical and do not allow for wastage, surface profiles that are not up to standard, porosity, variations in levels etc.

HEALTH AND SAFETY INFORMATION

Wear a dust mask when mixing **NuCote SL**

Underlayment. Suitable gloves and eye protection should be worn at all times.

In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice. If inhaled move to fresh air. Consult a physician after significant exposure. If swallowed, clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. In case of skin contact, take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician when in contact with existing open wounds.

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent **Material Safety Data Sheet** containing physical, ecological, toxicological, and other safety-related data.

The Material Safety Data applicable to the handling of epoxy raw materials should be read, understood, and rigidly adhered to. These are available on request from **NuCote**.

AUTHORISED TECHNICAL PERSONNEL

Please note that only **NuCote** Authorised Technical Personnel are permitted to change any information in this datasheet or provide recommendations concerning the use of this product. Visit www.nucote.co.za for a current datasheet and materials safety datasheet.

DATASHEET VALIDITY

NuCote makes modifications to its datasheets from time to time when needs arises. Please check the current datasheet on www.nucote.co.za to ensure you use the latest version.

WARRANTIES

NuCote supplies products that comply with the properties as shown on the current product datasheets. **NuCote SL Underlayment** is guaranteed to be free of any manufacturing defects. In the event that products supplied are proved not to comply with these properties, then NuCote will replace the non-complaint product or refund the purchase price. Any suspected defects must be reported to NuCote in writing within five working days of being detected.

NuCote does not warrant or guarantee the installation of the products as it does not have control of the installation or end use of the products. If **NuCote SL Underlayment** is applied in accordance with the appropriate method statement issued for the specific project, by an approved applicator, and the substrate complies with the minimum substrate requirements and contact slabs have damp proof membranes and good drainage installed prior to the casting of the concrete screed, then the system is to last for the life of the sealer or topcoat applied over it.

We discourage placing **NuCote SL Underlayment** on slabs with questionable hydrostatic pressure issues or where residual screed moisture content exceed 5 %, on substandard substrate in terms of compressive and tensile adhesion strength, or badly prepared substrate.

NuCote makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other representations, warranties, agreements, promises or commitment expressed or implied. **NuCote** shall not be liable for damages of any kind with respect to purchases or use of **NuCote Underlayment**, including remote or consequential damages, down time, delays, and application failures.

In accordance with ISO 9001:2015 and the Occupational Health and Safety Act (Act 85 of 1993), herewith Product and Safety Data Sheet.

We hereby confirm that we have received a Product and Safety Data Sheet for **NuCote SL Underlayment** system and are returning the obsolete copies.

COMPANY NAME:

SIGNATURE:

NAME:

DATE:

CAUTION

The information contained in this bulletin is to the best of our knowledge true and accurate but any recommendations or suggestions, which may be made, are without guarantee since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.