

TECHNICAL DATA SHEET

NuCote™ Impact Elastoplastic Flow Coat

PRODUCT DESCRIPTION

NuCote Impact is a two-component, solvent free, high performance, self-leveling, high abrasion resistance and decorative elastoplastic polyurethane coating system which creates a seamless hygienic gloss finish.

The system consists of a pre-weighted Part A - Polyol and Part B - Isocyanate.

Once cured **NuCote Impact** provides a hard wearing, high impact and abrasion resistant finish.

ADVANTAGES

- Good abrasion resistance.
- Good adhesion to primed substrates.
- Easily applied on floors.
- Solvent free, no odour during application.
- Available in a wide range of colours.
- Non-toxic.
- Simplified mixing.
- Corrosion resistance.
- Provides seamless floors.
- Chemical resistance.
- Impervious and non-absorbing surface finish.

APPLICATION AREAS

- Production facilities coatings.
- Warehouses floor coatings.
- Smooth polyurethane coatings.
- Residential floor coatings.
- Pharmaceutical facilities.

TECHNICAL DATA

DESCRIPTION	RESULTS
Pot Life (Minutes)	>15 – 20 Minutes (25°C)
Specific Gravity (g/l)	1.25
Touch Dry (Hours)	6 - 8 hrs
Recoat Time (Hours)	6 – 16 hrs
Solids content	100 %
Shore D Hardness	60 - 76
Tensile Strength (Mpa)	16 -20
Elongation %	60 - 80
Adhesive Strength Steel (Mpa)	8-12
Minimum WFT	1 mm
Permeability gm/24 Hr/M2	0.2 – 0.3
Abrasion Resistance Taber 1000 gm/1000 cycles H10	0.01 – 0.02
Coverage (m ²)	2 L/m ² @ 2 mm
Viscosity cps (25C) - Part A	1300 - 6000
Viscosity cps (25C) - Part B	250

Note: The values given are average figures achieved in laboratory tests.

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PACKAGING

NuCote Impact is supplied as a two component 5 Kg and 10 Kg kit.

STORAGE AND STABILITY

NuCote Impact Part A and **Part B** have a shelf life of 12 months when stored in the original containers in a cool, dry place. Failure to do so will result in a reduction of shelf life.

NuCote Impact Part A is hygroscopic and should therefore be stored with container seals intact. Partially used container must be tightly sealed and used before opening fresh containers. Foaming, when mixed with **NuCote Impact Part B** is an indicator that moisture had been absorbed.

NuCote Impact Part B is a diisocyanate and will react with moisture, generating carbon dioxide. The container should be stored with seals intact and opened containers used first. Do not reseal containers once the contents have been used up.

SURFACE PREPARATION.

Mechanical preparation of the substrate is important before priming with **NuCote MT Primer** or **NuCote GP Primer** takes place. The substrate should be structurally sound and free of oil, dust and debris, grease, paint, corrosion deposits, laitance, or other surface deposits. The surface should be prepared by captive blasting to exposed aggregate surface. Any cracks or bug holes should be filled with **NuCote Epoxy Paste** after application of **NuCote MT primer** or **NuCote GP Primer**. Ensure moisture content is less than 5% preferably less than 3%. Consult **NuCote** Technical sales staff for advice on substrate survey and preparation.

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 or 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. Prior to 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** or **NuCote MT 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).

POT LIFE AND CURING

NuCote Impact has a pot life of 15 minutes at an ambient temperature of 25°C, the product must be applied within 15 minutes from time of beginning of mixing the two components together. The viscosity will rise rapidly after 15 minutes, become unusable after 20 – 40 minutes (depending on ambient temperature). The product can be applied at temperatures between 20 and 25°C. Should the temperature increase, an accelerated reaction can be expected.

MIXING

Premix base (Part A) to disperse any settlement and to ensure homogeneity. Add all of part B to part A and mix using a slow to medium speed drill with a mixing paddle for 2 - 3 minutes until both components have fully dispersed and a homogenous, uniform colour is achieved. Ensure to rotate the mixer inside the container. Only mix full kits, no splitting of kits is recommended. It is recommended that material adhering to the sides and bottom of the container is incorporated into the mix.

APPLICATION

Application of the product must be undertaken within 15 Minutes, timed from the beginning of the mixing of **NuCote Impact Part A** and **NuCote Impact Part B**.

For 1 mm Dry Film Thickness: (Notch Trowel or Pin Leveller Method)

To achieve a 1 mm DFT, pour mixed material on the floor and rake out using a 2mm notch trowel, spreading evenly at a thickness of 1,0 mm. De-aerate and level by rolling with a spiked roller for up to 20 minutes from counted from beginning of mixing the two components. Spiked shoes are utilised to walk onto wet material during the levelling and de-aeration process.

For 2 mm Dry Film Thickness: (Notch Trowel or Pin Leveller Method)

To achieve a 2 mm DFT, pour mixed material on the floor and rake out using a 5mm notch trowel, spreading evenly at a thickness of 2,0 mm. De-aerate and level by rolling with a spiked roller for up to 20 minutes from counted from beginning of mixing the two components. Spiked shoes are utilised to walk onto wet material during the levelling and de-aeration process.

For 3 mm Dry Film Thickness: (Notch Trowel or Pin Leveller Method)

To achieve a 3 mm DFT, pour mixed material on the floor and rake out using a 6mm notch trowel, spreading evenly at a thickness of 3,0 mm.

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 **NuCote**™
FLOORING PERFECTION

DISAVOWAL: The customer acknowledges and understands that after delivery, the goods will have left the control of Rigifoam (Pty) Ltd, and that the customer will be responsible for the unpacking of and connection/installation of the goods. The customer acknowledges that it is his/her further responsibility to ensure that a fully qualified and competent person is used to install the goods to ensure their effective operation. Failure by the customer to ensure the installation of the goods, according to the written instructions of the manufacturer and/or supplier, by a fully qualified and competent person, may result in the failure of the goods, injury, loss or damages to the customer. Accordingly, and in this event, Rigifoam (Pty) Ltd accepts no responsibility for any loss or damages that might arise by reason of death or personal injury to any person engaged in the installation or use of the goods thereafter, subject to the provisions of the Consumer Protection Act 68 of 2008.

De-aerate and level by rolling with a spiked roller for up to 20 minutes from counted from beginning of mixing the two components. Spiked shoes are utilised to walk onto wet material during the levelling and de-aeration process.

Mix ratio by volume is NuCote Impact Part A = 3 : NuCote Impact Part B = 1

NB: If cold conditions prevail, the material is thicker. Substrates and material should be warmed to allow for good flow out of the mixed material. Do not pull under ambient temperatures.

CLEANING

Clean hands and skin immediately after use with industrial hand cleaner. Clean tools and equipment immediately after use with **NuCote Cleaner A** or **NuCote Cleaner MEK**.

LIMITATIONS

- Working temperatures between 20 and 25°C.
- **NuCote Impact** will not accommodate movement cracks.

COLOURS

	Light Grey	RAL 7038
	Basalt Grey	RAL 7042
	Pebble Grey	RAL 7032
	Platinum Grey	RAL 7036
	Emerald Green	RAL 6001
	Beige	RAL 1001
	Oyster White	RAL 1013
	Traffic Black	RAL 9017
	Sky Blue	RAL 5015

WATCH POINTS

Humidity, moisture and curing of the primers are essential to this system. The Colours are not UV stable however, functional. They may discolour when exposed to direct sunlight or UV. Storage is also vital to ensure the materials remain in a workable condition.

DISCLAIMER

Colours will always vary according to the printed version on our literature. 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

NuCote Impact Part A is considered non-toxic, the usual precautions for working with chemicals should be exercised when handling this product. Use only with adequate ventilation. Avoid breathing of vapours and prolonged or repeated skin contact. Protective clothing and gloves should be worn when handling this product.

NuCote Impact Part B is a diisocyanate and usual precautions should be exercised when handling this chemical. Use only with adequate ventilation and avoid breathing of vapours and prolonged or repeated skin contact. Protective clothing should be worn and contact with the body avoided. All sources of ignition should be removed. Inhalation of fumes must be strictly avoided. 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 polyurethane 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.

WARRANTIES

NuCote supplies products that comply with the properties as shown on the current product datasheets. **NuCote Impact** 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 Impact** 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 Impact** on substrates 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 Impact**, including remote or consequential, damages, down time, delays, and application failures.

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.

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™ Impact** system and are returning the obsolete copies.

COMPANY NAME:

SIGNATURE:

NAME:

DATE:

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