

TECHNICAL DATA SHEET

TERRAMARE I

SILOSSANIC MASONRY EXTERIOR PAINT Eco-Sustainable Paint Product made from Natural Materials

FIELDS OF APPLICATION

TerraMare I is an ideal finish masonry paint, highly hydro-repellent and permeable, high exterior performance in all weather conditions, with excellent UV resistance. TerraMare I can be applied on virgin Portland cement stuccos, painted cement stuccos, reinforced concrete and plastic resin stuccos. TerraMare I can also be applied over concrete block or brick, painted and non-painted. Silossanic paints have a high performance with exposure to sun, rain and inclement weather conditions. Silossanic Paints are particularly suited in urban environments where carbon pollution, dirt, and chemicals are prevalent because of silossanic's ability to self-clean during rain cycles.

TerraMare I can be used on aging cement stuccos and cement block where water penetration has become a destabilizing agent and stucco or block that is being effected by efflorescence or salt nitrate discoloration. TerraMare I is a non-aggregate paint, and dries to a flat mineral paint like sheen, so that colors and effect is similar to a historical lime wash or potassium silicate paint. Product can also be painted on new or old cement stuccos where high scrub-ability is desired, and is ideal for surfaces where unusual wet conditions exist.

PRODUCT FEATURES

This silossanic paint has very low VOC content and is completely permeable, breathable, hydro-repellent, self-cleaning and washable. Product has excellent anchorage to all new masonry surfaces, is a non-yellowing, non-thermoplastic, with high resistance to aging and UV damage. Paint sheen is flat/opaque, and when applied by brush creates very subtle chromatic variations. Product can be applied by brush, roller or sprayer, with full coverage achieved in two (2)-coats. Because of the hydro-repellent properties this paint has self-cleaning properties and does not permit the accumulation of dirt or pollution to deposit in the stucco pores of the surface, easily washing off by rain or with a light rinsing.

Silossanic paint is based on a silicone rubber water based formula, being made from silica (sand), and is an Eco-sustainable paint as described in the Eco Category description.

TYPE OF PRODUCT

Silossanic coating according to DIN 4108, based on silicone rubber with organic stabilizers. No acrylic binders used.

SHEEN FINISH

Flat

COLOR

White Base. Color tint up to 20% max with approved tints. Custom color tint matching available.



TECHNICAL DATA

CRITERIA	INT. STANDARD	VALUE	UNIT
TVOC & VOC (including tint pigments)	2004/42/CE Primer, Max. Value 40g/lt 2010	12	g/l
Water Absorption Coefficient	EN 1062-3 – DIN 52617	> 0.07	kg/(m²• √h)
Vapor Permeability	EN 1062-1/UNI 10795	< 180 m / S _d 0.010 high	g/m² (24 h)
Whiteness	CIE	65	%
Surface Retention Smog/Dirt	EN 10795	Very Low	> 3
Drying Time at Low Temperature	UNI 10793	> 5	°C
Application on New Cement	UNI EN 13300	Ideal	_
Exterior Silossanic Paint	DIN 18363 paragraph 2.4.1	Yes	_
Application Quality	UNI 10794	Good	_
Hide and Cover Capacity	ISO 6504-3 M.U. 1631 (RC 100 μm Humid)	Class 1	_
pH value	DIN 19266	7.5 – 8	_
Resistance to Mold	DIN 19266	Product ideal to mold and algae resistance for exterior application	Aspergillus Niger, Penicillum ochrochloron Pullularia pullulans
Alkaline Resistance	UNI 10795	Excellent	mm
Specific Weight (23°C)	EN ISO 2811-2	130	Kg/lt
Granulation	DIN 19643 – EN 21524	0.01	mm
Gloss Level	UNI EN ISO 2813	< 5	Very Flat
Reaction to Fire	EN 13501-1:2002	A 1	_
Toxicity	EN 13501-1:2002	Non-Toxic	_
APEO (Alkyl Phenol Ethoxylates)	_	0%	-
PEG (Polyethylene Glycol)	-	0%	-
PG (Propylene Glycol)	_	0%	_
Biocides	-	0%	-

Does not contain chemicals that can aggravate or cause asthma, see NIH Asthma Report 2012.

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APPLICATION CYCLE INSTRUCTIONS

BRUSH AND ROLLER APPLICATIONS

1ST COAT Apply TerraMare Sealer without dilution, to all new masonry surfaces prior

to applying TerraMare I. Allow Sealer to dry for at least 8 – 12 hours. Dilute TerraMare I with 25% water, maximum 3.75 liters of water per one (1) 15-liter bucket of TerraMare I. Apply to surface with brush, roller or sprayer. Allow to

dry for at least 8 - 12 hours.

2ND COAT Apply TerraMare I diluted 25% using application tools as described above.

PAINT SPRAYERS

1ST COAT Follow instructions indicated above except dilute TerraMare I with 20%

water, maximum 3 liters of water per one (1) 15-liter bucket. Spray a

consistent and even coat.

2ND COAT Repeat instructions for 1st coat for paint sprayer.

SPRAY TIP USAGE TerraMare I can easily be applied using an airless sprayer. Apply paint product

with a # 0.019 – 0.021 mm size spray tip. Always use new spray tips for starting a paint job for best results. This will also conserve the amount of

paint necessary to complete the job.

GRAIN SIZE 0.01 mm

MIXING PAINT & WATER

Most of our paint formulas are concentrated and require water to be added to them for proper use. This process means we can sell more coverage in an economical package that decreases the cost for transport, reduces the carbon footprint, helping the your pocket book and the environment.

Mix paint and water with an electric drill and paint paddle, or mix well by hand! If water is sitting on the top of your mixture, the paint is not properly mixed!

TOOLS

Apply with brush, roller or with the an appropriate sprayer.

DRYING TIME

Allow a drying time between coats of at least eight (8) – twelve (12)-hours. With lower temperature and humidity more time may be needed.

Do not apply TerraMare Sealer or TerraMare I on the exterior if there is a risk of thunder storms or showers during the 12 hour drying time needed for product to dry correctly.



CONSUMPTION/COVERAGE

Approximately $2,000 \text{ ft}^2 / 190 \text{ mt}^2 \text{ per } 15 \text{ liters bucket.}$ On rough or porous surfaces predict higher consumption. Determine exact consumption by performing a test on the surface to be treated.

PACKAGING

Plastic buckets of 1, 5 and 15 liters.

APPLICATION CYCLES ON DIFFERENT TYPES OF BASES

Make sure base is solid, dry and well cleaned, prepared with skill. It is recommended to observe the rule VOB DIN 18 363, Part C, paragraph 3.

NEW CEMENT STUCCOS

New cement should not be painted for about 28 days to ensure proper anchoring and drying. Apply one (1)-coat of TerraMare Sealer non-diluted, with brush, roller or sprayer, and allow to dry for at least 8 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare I according to instructions indicated above.

EXTERIOR PAINTED WALLS

Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or by mechanical means, i.e., with a high-pressure washer. Apply 1 coat of EcoDis on dried surface and allow to dry for at least 12 hours where algae or mold has been present. If the exterior surface is porous or powdered 1 coat of TerraMare Sealer must be applied prior to application of TerraMare Grip. Apply 1 coat of TerraMare Grip according to instructions using brush or roller only and allow to dry for at least 8 hours, and then 2 coats of finish product TerraMare I.

If the acrylic paint surface has a flat sheen and is intact and in excellent to good condition then TerraMare I can be applied without the need of sealer or grip as a primer. For best results always use TerraMare Grip prior to application of TerraMare I.

SYNTHETIC STUCCO

Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or by mechanical means, i.e., with a high-pressure washer. Apply 1 coat of EcoDis on dried surface and allow to dry for at least 12 hours where algae or mold has been present. TerraMare Sealer is not required for application on acrylic surfaces. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare I according to instructions indicated above.

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REINFORCED CONCRETE SURFACES

New cement should not be painted for about 28 days to ensure proper anchoring and drying. Apply 1 coat of EcoForte Consolidator (diluted 50% with water, or 2:1), allow to dry for at least 12 hours. Apply one (1)-coat of TerraMare Sealer non-diluted, with brush, roller, or sprayer and allow to dry for at least 8 – 12 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare I according to instructions indicated above.

DECAYING OR CRUMBLING STUCCOS OR POWDERY SURFACES

Chalking surfaces, which could prevent the proper anchoring of the base coating must be removed and pressure washed. Apply Potassium Silicate Concentrate, diluted 100% with water (1:1) on all damaged surfaces and allow to dry for at least 12 hours. Apply one (1)-coat of TerraMare Sealer non-diluted, with brush, roller, or sprayer and allow to dry for at least 8 – 12 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare I according to instructions indicated above.

COATINGS WITH EFFLORESCENCE

Cement surfaces showing efflorescence should be removed with acid and thoroughly rinsed with water. Apply Potassium Silicate Concentrate, diluted 100% with water (1:1), on all damaged surfaces and allow to dry for at least 12 hours. For coatings on surfaces damaged by the saltpeter or efflorescence no guarantees can be provided. Apply one (1)-coat of TerraMare Sealer nondiluted, with brush, roller or sprayer and allow to dry for at least 8 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare I according to instructions indicated above.

AGED CEMENT STUCCOS

When new stucco repairs are performed on older cement stuccos, apply Potassium Silicate Concentrate diluted 100% with water (1:1), to older surfaces prior to applying new cement stucco. Dirty and/or contaminated surfaces should be cleaned and any attached algae removed manually or by mechanical means, i.e., with a high pressure washer. Stucco damaged by algae or mold should be treated with EcoDis prior to application of Potassium Silicate Concentrate. Apply 1 coat of EcoForte Consolidator diluted 100% with water (1:1) on all surfaces and allow to dry for at least 12 hours. Apply one (1)-coat of TerraMare Sealer non-diluted, with brush, roller or sprayer. and allow to dry for at least 8 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare I according to instructions indicated above.

STUCCO REPAIRS

See Aged Cement Stuccos above.



MINERAL PAINTS OR LIME WASH

Potassium Silicate Concentrate or EcoForte Consolidator can be applied on existing Mineral Paints or Lime Washes to consolidate worn or powdery bases prior to applying TerraMare Sealer. Apply EcoForte Consolidator product, diluted 100% with water (1:1), and allow to dry at least 12 hours. Apply 1 coat of TerraMare Sealer non diluted, and allow to dry for at least 12 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare I according to instructions indicated above.

BRICK SURFACES

For consolidation of old brick and mortars: Dirty and/or contaminated surfaces should be cleaned and any attached algae removed manually or by mechanical means, i.e., with a high pressure washer. Apply 1 coat of Ecodis on dried surface and allow to dry for at least 12 hours. Apply 2 Coats of Potassium Silicate Concentrate, diluted 100% with water (1:1) in rapid succession. Allow double coat to dry for at least 12 hours. Apply 1 coat of TerraMare Sealer non diluted, and allow to dry for at least 12 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare I according to instructions indicated above.

STORAGE

Store in a cool, dry and protected from frost. Close the open containers with care. Store liquids only in plastic.

WARNING!

Do not apply any products in direct exposure to strong/hot sunlight, rain, high humidity (mist) or in the presence of strong wind. Beware of the danger of frost overnight. If applied by roller or sprayer, protect surrounding surfaces as necessary. Protect eyes and skin from splashes of paint. Cover glass, ceramic, natural stone, brick, metal, wood, painted surfaces and glazed tiles. Clean affected areas immediately with water. Prominent elements of the building (cornices, parapets, etc.,) should be treated with skill, covering flashings, gutters, copper coatings, etc. ...

Do not work in air temperature lower than 8°C / 46°F and not above 31°C / 88°F. Clean work tools with water immediately after use. Keep out of reach of children. In case of contact with eyes and skin, wash immediately with plenty of water. In cases of consumption, consult a Doctor or call the CDC Poison Center (see Safety Data Sheet).

WATER CONTAMINATION HAZARD

CLASS 1

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of information required by the CPR, and it is classified as a non-hazardous material.



PRODUCT CONTAMINATION HAZARD

CODE CER / NORMATIVE EAC / Decision commuted by the Commission n. 2000/532/CE

NOT DANGEROUS The directive 75/442/CEE, 08 01 production, disposal, formulation, supply, use and removal of paints and varnishes: 10 13 04 for removal of paints and varnishes; 10 13 04 disposal of lime and hydrated lime products.

DISPOSAL

Do not enter product in its original concentration into drains or open waters. Do not store at public waste disposal sites. In case of conduction into adapted biological purification plants no disturbances need be expected. The preparation has been estimated by conventional method (Calculated-procedure of EG directive 1999/45/EG) and is classified as non-hazardous for the environment.

Dispose according to local regulations. Empty cans should be disposed of according to local regulations; plastic buckets are 100% PBS, no. 5, approved for food storage; 100% recyclable if cleaned thoroughly prior to recycling.

ADDITIONAL INFORMATION

Warning: This Technical Sheet lists data collected on the basis of technique and experience. Given the multiplicity of use of the product they cannot be binding and the user can not refrain from using common sense and experience for the individual case. This information shall not constitute any legal obligation and no obligation from the seller or point of purchase, or any agreements inferred by employees who sale this product. Insurance or guarantees issued by our employees or employees should always be confirmed separately in writing. Any information about product adaptability and use of the product, must be verified by user prior to purchase. Check the exact consumption of product for the surface where product may be applied to determine amount of products needed. The color matching must be verified by the user before starting work.

MANUFACTURER

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