

NANO-SET

PLASTER & CONCRETE ADMIXTURE

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PRODUCT DESCRIPTION

NANO-SET is a performance-enhancing additive that integrates directly into pool plaster to reduce pigment loss, mottling, plaster dust, surface defects and minimizing callbacks.

Formulated to control calcium hydroxide release and pH spikes, this admixture delivers faster, more predictable startups while strengthening and refining plaster surfaces from within to enhance durability, chemical resistance, and application efficiency.

KEY STRENGTHS

- **Predictable Startups:** Controls calcium hydroxide release and pH spikes for faster, more consistent pool startups.
- **Surface Protection:** Reduces pigment loss, mottling, and plaster dust to minimize callbacks and maintain visual appearance.
- **Built-In Durability:** Strengthens plaster surfaces from within, improving resistance to wear and chemical exposure.
- **Application Efficiency:** Refines plaster texture and workability for smoother, more streamlined installations

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WORKING PRINCIPLE

- Plaster & Concrete Admixture forms millions of fine mineral-based fibers inside the capillary pores.
- These dense, interlocking fibers reduce the pore diameter, thus blocking the flow of water through the capillary voids.

The NANO-SET Plaster & Concrete Admixture chemicals remain an integral part of the concrete for the life of the structure, always re-activating whenever exposed to moisture. NANO-SET can seal static cracks up to 1/64" (0.4 mm), which occur months or years after the concrete has cured and hardened. NANO-SET Plaster & Concrete Admixture starts reacting immediately. However, it may require up to several weeks to reach its maximum capability. Environmental factors such as ambient temperature, density of concrete, moisture and weather conditions all can affect the timing of the sealing process. Concrete treated with NANO-SET protects against rebar corrosion, spalling, freeze/thaw cycles and weather related damage.

TYPICAL APPLICATIONS

- Pool Plaster
- Tunnels and subway systems
- Foundations
- Precast structures
- Parking structures
- Water and waste water treatments plants
- Reservoirs and underground vaults
- Secondary containment structures

ADVANTAGES

- Resists extreme hydrostatic pressure, positive (active) or negative (passive) water pressure side
- Can self-seal static hairline cracks up to 1/64" (0.4 mm)
- Permanent - becomes an integral part of the concrete
- Not a vapor barrier - allows concrete to breathe
- Negligible interference with water reducers & plasticizers
- Negligible effect/influence on slump and air entrainment
- Impervious to physical damage and deterioration
- Non toxic, inorganic, zero VOC (0%)
- Contains no chlorides

PACKAGING

NANO-SET-Liquid: 5 gallon pails and 240 gallon totes.

CURING

Cure as per relevant ACI guidelines.

DURABILITY

Plaster and concrete treated with NANO-SET Plaster & Concrete Admixture is more durable than equivalent plain concrete due to its reduced permeability.

NON-CHLORIDE, NON-CORROSIVE

NANO-SET Plaster & Concrete Admixture will not initiate or promote corrosion of reinforcing steel embedded in concrete. Neither sodium chloride, calcium chloride nor any chloride-based ingredients are used in the manufacture of NANO-SET.

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FINISHES

If coatings, paint or other treatments are to be used on the negative side of NANO-SET concrete, thorough surface preparation is required to remove waterproofing crystals from the surface (i.e. minimum 5000 psi high pressure water blasting).

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STORAGE AND SHELF LIFE

NANO-SET-LIQUID

Store in room above 50°F (10°C). **NOTE:** Settlement or crystallization may occur below 50°F (10°C). If this happens, store in room above 70°F (21°C) for 24 hours and re-stir. Protect from freezing. If frozen or crystallized, thaw gradually and stir to homogeneous mixture. Shelf life in unopened original containers is twelve months when stored at 70°F (21°C).

NOTE: Proper application is the responsibility of the user. Field visits by Sabal Green Group personnel are for the purpose of making technical recommendations and not for supervising or providing quality control on-site.

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GENERAL INFORMATION

All details in particular to the suggestions for the processing and use of the product is based on our present knowledge and experiences at the time of printing.

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SAFETY

CAUTION:

Follow Best Safety Practices

Clear to hazy, bluish, odorless, thick liquid. Causes moderate eye, skin, and digestive tract irritation. Spray mist causes irritation to respiratory tract. Due to high pH of product, release into surface water is harmful to aquatic life. Noncombustible. Spills are slippery. Reacts with acids, ammonium salts, reactive metals and some organics.

DANGER:

Causes serious eye irritation. May be harmful if swallowed. Upon drying forms thin glass that can cut skin. Spilled material may cause slipping hazard. Wash thoroughly after handling. Wear eye, hands, and face protection. Significant exposures must be referred for medical attention immediately. There is no specific antidote.

GHS HAZARD STATEMENTS:

- Causes serious eye irritation

- ACUTE TOXICITY – ORAL: Category 5 (May be harmful if swallowed)

GHS – PRECAUTIONARY STATEMENT(S) – PREVENTION

- Wear eye protection/face protection/hand protection
- Wash thoroughly after handling
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- IF SWALLOWED: Call a poison center or doctor/physician if you feel unwell.

Keep containers closed. Store in clean steel or plastic containers. Separate from acids, reactive metals, and ammonium salts. Storage temperature: 0–95 °C. Loading temperature: 45–95 °C. Do not store in aluminum, fiberglass, copper, brass, zinc or galvanized containers.

WARRANTY

LIMITED WARRANTY: Sabal Green Group, warrants this product for a period of one year from the date of installation to be manufactured free of defects and to be consistent with its technical properties as stated in our current Technical Data Sheet. This product must be used as directed and within its stated shelf life. Sabal Green Group will replace or at our discretion refund the purchase price of any product, excluding cost of labor, which is proven to be defective. Our product recommendations are based on industry standards and testing procedures. It is the buyer's obligation to test the suitability of the product for an intended use prior to using it. We do not guarantee compatibility of Sabal Green Group products with other brands. For this reason, we strongly recommend application of a sample area at the jobsite to help determine suitability with other products. We assume no warranties written, expressed or implied as to any specific methods of application or use of the product. SABAL GREEN GROUP INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. SABAL GREEN GROUP, INC. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay. Any claim for a defective product must be filed within 30 days of discovery of a problem, and must be submitted with written proof of purchase.

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For Professional Use Only

14.0 NANO-SET PLASTER & CONCRETE ADMIXTURE DOSAGE RATES

HOW MUCH NANO-SET TO USE?

Nano-Set Ratio Depends on Finish Type.

TYPE 1: PRE-BLENDED FINISH

Description: Cement, sand pebble/quartz pre-blended in 80lb bags

Nano-Set Ratio: Add 7oz Nano-Set per 80lb bag of Pre-Blended Material

EXAMPLES:

- **NPT**® StoneScapes®, JewlScapes®
- **CLI**® Krystalkrete®, Sunstone® Hydrazzo®

- **Universal**® Micro Fusion®, Radiant Fusion®
- **Florida Stucco**® Gem®, Reserve®, Petit Pearl®
- **SGM**® Diamondbrite®, etc.
- **PMM**® Freestone®, Marquis®
- **Federal White Cement**®
- **All Pre-blended Plaster Material**

Finish examples provided for reference only. Cement volume per bag may vary. Contact finish manufacturer for cement volume per bag of pre-blended material.

Measuring & Mixing Instructions

PRE-BLENDED PLASTER (80 LB BAGS)

Add 7 oz of Nano-Set Liquid per 80 lb bag.

SITE-MIXED PLASTER (USING 94 LB BAGS OF PORTLAND CEMENT)

Add 24 oz of Nano-Set Liquid per 94 lb bag.

Combine the Nano-Set Liquid with the mixing water before adding to the dry materials.

15.0 NANO-SET PLASTER & CONCRETE ADMIXTURE TECHNICAL DATA

Physical Data	Nano-Set-Liquid
Aggregate State	Liquid
Color	Translucent Yellow
Bulk Density @ 68°F (20°C)	9.10 lbs/gal. (1.15 kg/L)
Viscosity: Brookfield	4-7 (LV#61/100)
VOC	0
Working Temperature	>46°F (8°C)