

NanoLok 90™

Mortar and Cement Fortifier



PRODUCT SUMMARY:

NanoLok 90™ is a nano-polymer admixture for all types of cementitious products including cement, mortar, plaster, stucco, and tile adhesives. Cured mortars modified with NanoLok 90™ have excellent water resistance and adhesion to a variety of substrates, in addition to increased compressive and flexural strength. This water-based, VOC-free product also reduces cracking and separation by increasing flexibility with its nano-polymer technology.

PACKAGES:

- 16oz bottle
- 1-Gal bottle
- 5-Gal bottle
- 55-Gal drum
- 275-Gal tote

FEATURES & BENEFITS:

- Water-based, VOC-free, nano-polymer admixture for modifying cement, mortar, & tile adhesives to increase strength, flexibility, adhesion, & water resistance.

TYPICAL USES:

- Cement
- Mortar
- Tile Adhesive
- Stucco
- Plaster
- Concrete Repair

COVERAGE:

* For use with Portland Cement products **Water : NanoLok 90™**

Application	Normal Strength	Max Strength
Cement	4:1	2:1
Mortar (exterior use)	4:1	2:1
Mortar/Tile Adhesive (interior use)	6:1	3:1
Stucco	4:1	2:1
Patch/Repair Slurry	2:1	1:1
*Primer Coat/ Concentrate	2:1	1:1
Water Features	2:1	1:1



TechniSoil NanoPave® NanoLok 90

1. PRODUCT & COMPANY IDENTIFICATION

TRADE NAME: TechniSoil Global, Inc.
 PRODUCT NAME: NanoPave® NanoLok 90
DISTRIBUTED BY:
 TechniSoil Global, Inc.
 5660 Westside Rd. Redding, CA 96001
 Toll Free: 877.356.2250

24-HOUR EMERGENCY TELEPHONE NUMBER:
 Chemtrec: US: 800-424-9300
 INTL: 703-527-3887

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT:	RANGE:	CAS NO:
Proprietary Nano-Polymer Blend	4% – 18%	Not Hazardous
Water	82% – 96%	Not Hazardous

Volatile organic compound (VOC) levels for this product are <= 5 g/l.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW PHYSICAL APPEARANCE:	HAZARD SUMMARY: CAUTION!
Form: Liquid Colour: White, Milky Odor: Acrylic	Inhalation of vapor or mist can cause headache, nausea and irritation of the nose, throat, and lungs. May cause eye and skin irritation

Potential Health Effects Primary Routes of Entry:
Inhalation, Eye contact, Skin contact

Eyes: Direct contact with material can cause the following: slight irritation
 Skin: Prolonged or repeated skin contact can cause the following: slight irritation
 Inhalation: Inhalation of vapor or mist can cause the following: irritation of nose, throat, and lungs headache nausea

4. FIRST AID MEASURES

- Inhalation: Move to fresh air.
- Skin contact: Wash with water and soap as a precaution. If skin irritation persists, call a physician.
- Eye contact: Rinse with plenty of water. If eye irritation persists, consult a specialist.
- Ingestion: Drink 1 or 2 glasses of water. Consult a physician if needed.
- Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

- Flash point: Noncombustible
- Lower explosion limit: Not Applicable
- Upper explosion limit: Not Applicable
- Thermal decomposition: May yield acrylic monomers.
- Suitable extinguishing media: Media appropriate for surrounding fire.
- Specific hazards during fire fighting:
Material can splatter above 100C/212F. Dried product can burn.
- Special protective equipment for fire-fighters:
Wear self-contained breathing apparatus and protective suit.



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6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Use personal protective equipment.
Keep people away from and upwind of spill/leak.
Material can create slippery conditions.

ENVIRONMENTAL PRECAUTIONS

Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

METHODS FOR CLEANING UP

Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

7. HANDLING & STORAGE

HANDLING

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container tightly closed. Do not breathe vapors, mist or gas. Further information on storage conditions: Keep from freezing - product stability may be affected. Stir well before use.

STORAGE

Storage temperature: 40 - 90 °F (4.44 - 32.2 °C)
Other data: Monomer vapors can be evolved when material is heated during processing operations. See SECTION 8, for types of ventilation required. NOTE: Formaldehyde will be generated under acidic conditions. Maintain adequate ventilation under these conditions to prevent exposure to formaldehyde above the Rohm and Haas Co. recommended ceiling of 0.3 ppm.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT(S)

Exposure limits are listed below, if they exist.

COMPONENTS	REGULATION	LISTING TYPE	VALUE
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----- Not Applicable -----

EYE PROTECTION: Safety glasses with side-shields Eye protection worn must be compatible with respiratory protection system employed.

HAND PROTECTION: The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Neoprene gloves published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONTINUED)

RESPIRATORY PROTECTION: A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. For airborne concentrations up to 10 times the exposure limit, wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) N95 filters. If oil mist is present, use R95 or P95 filters.

PROTECTIVE MEASURES: Facilities storing or utilizing this material should be equipped with an eyewash facility.

ENGINEERING MEASURES: Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Form: liquid
 Colour: white milky
 Odor: acrylic

COMPONENT	VALUE
pH	7.0 - 8.0
Boiling point/boiling range	100 °C (212.00 °F) Water
Melting point/range	0 °C (32 °F)
Flash point	Noncombustible
Lower explosion limit	Not Applicable
Upper explosion limit	Not Applicable
Vapour pressure	17.0 mmHg at 20 °C (68.00 °F) Water
Relative vapour density	<1.0 Water
Water solubility	Dilutable
Relative density	1.00 - 1.20
Viscosity, dynamic	1,000.000 mPa.s maximum
Evaporation rate	<1.00 Water
Percent volatility	43 - 45 % Water
Volatile organic compounds (VOC)	<= 5 g/L

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY & REACTIVITY

Hazardous reactions None known. Stable
 Materials to avoid There are no known materials which are incompatible with this product.
 Polymerization Product will not undergo polymerization.

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11. TOXICOLOGICAL INFORMATION

No data are available for this material. The information shown is based on profiles of compositionally similar materials.

Acute oral toxicity	LD50 rat > 5,000 mg/kg
Acute dermal toxicity	LD50 rabbit > 5,000 mg/kg
Skin irritation	rabbit May cause transient irritation.
Eye irritation	rabbit No eye irritation

12. ECOLOGICAL INFORMATION

THERE IS NO DATA AVAILABLE FOR THIS PRODUCT.

13. DISPOSAL CONSIDERATIONS

ENVIRONMENTAL PRECAUTIONS

Keep spills and cleaning runoff out of municipal sewers and open bodies of water. **DISPOSAL WASTE CLASSIFICATION:** When a decision is made to discard this material as supplied, it does not meet RCRA’s characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40 CFR 261.33. The toxicity characteristic (TC), however, has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP). Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. For disposal, incinerate or landfill at a permitted facility in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION

DOT	Not regulated for transport
IMO/IMDG	Not regulated (Not hazardous)

15. REGULATORY INFORMATION

WORKPLACE CLASSIFICATION	This product is considered non-hazardous under the OSHA Hazard Communication Standard (29CFR1910.1200). This product is not a ‘controlled product’ under the Canadian Workplace Hazardous Materials Information System (WHMIS).
SARA TITLE III: SECTION 311/312 CATEGORIZATIONS (40CFR370):	This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.
SARA TITLE III: SECTION 313 INFORMATION (40CFR372)	This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.
CERCLA INFORMATION (40CFR302.4)	Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.

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15. REGULATORY INFORMATION (CONTINUED)

US. TOXIC SUBSTANCES CONTROL ACT (TSCA):	All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
PENNSYLVANIA	Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

16. OTHER INFORMATION

HAZARD RATING:

	HEALTH	FIRE	REACTIVITY
HMIS	1	0	0

LEGEND

ACGIH	American Conference of Governmental Industrial Hygienists
BAC	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL)
TLV	Threshold Limit Value
TWA	Time Weighted Average (TWA)
" "	Bar denotes a revision from prior SDS

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.

The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.

The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.