



# NCS-20 NEGATIVE PENETRATING CONCRETE SEALER

## NEGATIVE SIDE FUNCTIONAL PENETRATING SEALER FOR CONCRETE

### MANUFACTURER

ENDUR-O-SEAL USA, Inc.  
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### PRODUCT DESCRIPTION

**NCS-20 Negative** is a waterborne, non-flammable, blend of proprietary polysiloxanes that are negatively charged in the manufacturing process. This unique process delivers an elastomeric membrane penetrating sealer that will not crystallize. **NCS-20 Negative** forms an integral elastomeric membrane within the concrete substrate that prevents water and/or moisture vapor transmission from the negative side. It is specifically engineered for the treatment of at grade or below grade concrete walls or floors with high negative side pressures. **Two applications minimum required.**

### TECHNOLOGY

**NCS-20 Negative** is highly reactive polysiloxane blend that is capable of extreme penetration rates ( $\frac{1}{2}$ " to  $1\frac{1}{2}$ ") into the concrete. The formula attaches itself to the substrate by electrochemical means. The formula then reacts with particular elements in the concrete to form a subsurface minimally vapor permeable elastomeric membrane. **NCS-20 Negative** will virtually eliminate MVTR (Moisture Vapor Transmission) in existing or new concrete. The membrane will stop water migration or sweating up to 18 psi. of hydrostatic head pressure, as well as radon.

### AREAS TO BE TREATED

Bare concrete, concrete bricks, fibercrete, mortar, structural concrete, and stucco.

### PRIMARY BENEFITS

**This product has a shelf life of 45 days unmixed and 15 days once the catalyst has been added.**

- Negative side functioning penetrating sealer.
- Long-term performance.
- Phase differential permeability technology.
- UV resistant
- Very low VOCs/non-toxic/non-hazardous.
- Prevents the water absorption/retention required for the growth of fungi or algae.
- Prevents adhesion of dirt and organic pollutants.
- Dries without staining discoloring or altering the look or feel of the surface.
- **NCS-20 Negative** is a non-discoloring treatment.
- Provides protection in extreme temperatures between -50°F and +225°F (-45.6°C and +107.2°C).

### TECHNICAL DATA

**V.O.C. Content:** <0.27 lbs./gal

**Flashpoint:** >+212°F (+100°C)

**Penetration:** 0.50-1.50"

**U.V. Resistance:** Pass (QUV 7500 Hrs)

**Breathability:** 96.6%@30% RH, 24.1%@90%RH (ASTM D1653)

**Water Leakage:** 99.78% Max (ASTM E 514)

**NCHRP 244 Chloride Absorption:** 99.4%

**Simulated Wind Driven Rain:** Pass (FS TTP 0035)

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### SURFACE PREPARATION

The material to be treated should be dry and free of non-integral dust, dirt, oil, wax, curing compounds, mildew, algae, alkali salts, efflorescence, coatings, and other graffiti matter. If being applied to an existing structure, the substrate should be thoroughly washed to remove all efflorescence, dirt, mildew, and fungi. Allow adequate time for drying prior to application.

- The area to be treated should have relative moisture content of less than 15%.
- The temperature of the substrate should be 40°F to 100°F (4.4°C to 37.8°C).

**Clean Substrates:** Use methods compatible with substrates and required appearance including, as applicable.)

- Sweeping and compressed air blasting.
- Water blasting.
- Sandblasting, follow with an air and/or water blast to remove loose particulate.
- Detergent scrubbing. Rinse with water and allow to dry.
- Chemical cleaners that are residual free and do not interfere with penetrating sealer/repellent. Rinse with water and allow substrate to dry.
  - Protect against over spray onto glass surfaces, plants, plastic, asphaltic surfaces, painted and polystyrene insulation surfaces.
  - Protect surfaces against oil/grease/fuel drips caused by cleaning equipment and other contamination of surfaces that are to be tested prior to use.

**New Construction:** Do not apply to interior below grade walls until:

- Wall cap has been finalized.
- **Pour/Cast-in-Place Concrete Substrates:** Allow to cure 14 to 21 days before treatment. (Based on 70°F (21.1°C) and 60% relative humidity.)
- **Concrete Masonry Substrates:** Allow mortar to cure seven days before treatment.

### EQUIPMENT

**Spray Equipment:** 60 psi or below airless, and/or Hudson pump up type. Tip should be fan pattern. Keep equipment and hoses clean and free of foreign contaminants that could obstruct equipment or be deposited on surfaces to be treated.

### PROJECT CONDITIONS

**Environmental Requirements:** Do not apply when the following conditions are present, except with written instructions from manufacturer:

- Ambient or surface temperature less than 40°F (4.4°C) or predicted to fall below 40°F (4.4°C) within 24 hours prior to or following application.
1. Rain within 72 hours prior to application or predicted within 24 hours after application.
  2. Wet or frozen substrates.
  3. If interior substrate is wet or damp apply two applications of Hydra Seal/Loc to assist in drying wall prior to **NCS-20 Negative**.
  4. High winds which could cause excessive over spray.
  5. Apply **NCS-20 Negative** as early as practical to protect substrates during construction. Do not apply to walls until wall cap is finalized.
- Allow joint mortar to cure seven days before treatment. (Based on 70°F (21.1°C) and 60% relative humidity).

### METHOD OF APPLICATION

Apply in a two wet-on-wet application.

1. Attach ¾" mixing tool (included) to your power drill.
2. Remove cap on the top of the pail and insert mixing tool. Thoroughly mix while adding the entire contents of the activator bottle, approximately three minutes.
3. Fill sprayer with mixed sealer.
4. Spray onto the surface maintaining a wet film-**CAUTION-DO NOT OVER SATURATE**. Spray motions should be side-to-side and followed by a crosshatch up and down motion.
5. While the surface is still damp, apply a second application within 15 to 20 minutes.
6. Avoid pooling or excessive rundown. Sweep away any puddles.

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### COVERAGE

Apply in accordance with the rates stated below or per architectural guide specifications. The following are approximate and may vary due to porosity of material to be treated. Do not dilute or modify, apply as supplied. Mix well before using. **Two applications minimum required.**

**Vertical Surfaces:** 200–300 sq. ft./gal.

**Smooth Horizontal Surfaces:** 250–400 sq. ft./gal.

**Light Broom Finished Surfaces:** 150–200 sq. ft./gal.

### PACKING AND STORAGE

Available in five gallon pails. Storage should be maintained in sealed containers between 40°F and 100°F (4.4°C and 37.8°C) and out of direct sunlight.

### CLEANING

Clean overspray on glass or metallic surfaces before evaporation of water. Wipe dry with clean, dry-cloth. If material has cured use a 50/50 mix of denatured alcohol and water and rub with a clean cloth.

### PROTECTION

- Do not permit traffic on treated surfaces until completely penetrated and the substrate is fully dry.
- Treated areas should be kept moisture free for 8 to 12 hours after application
- **Always utilize proper industrial hygiene practices.**
- Adequate ventilation should be provided during application and observe manufacturer's safety instructions. Read SDS and labels before using.

### CONTENTS

**Methyl Alcohol 64-17-5:** <5% (approx. weight %)

**2,6,8-Trimethyl-4-nonanol-123-17-1:** <5% (approx. weight %)

### WARRANTY

The information and recommendations made herein are based on research and that of others and are believed to be accurate. No Guarantee of test accuracy is made due to the considerable number of variables which can affect field application and performance of products including but not limited to surface conditions, job conditions. Users and purchasers are encouraged to determine the suitability of this product for particular purposes. EOS SYSTEMS warrants this product to conform to stated specifications and be free of defects at time of shipment. The company makes no other warranties either express or implied.

### CUSTOMER/TECHNICAL SERVICE

SYSTEMS provides a variety of technical services regarding the function and use of product. If you have any questions please contact your sales representative for further information 800-259-8855.

### SAFETY INFORMATION

Please refer to Safety Data Sheet.

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