

TECHNICAL DATA SHEET **(Seal100-R)**

“Seal100 plus surface oil and water repellent.
Permanent water proofing (internally/externally) & lifetime durability”

SEAL100-R

- Seals the concrete both internally and externally.
- Excellent chloride barrier.
- Provides concrete a superior cure imparting extraordinary strength, surface hardness impermeability and subsequently maximum durability.

PRODUCT DESCRIPTION

- Seal100-R, a colloidal silicate subsurface membrane plus surface repellent treatment.
- Cloudy-white in color, odorless, non-petroleum, colloidal liquid which is environmentally neutral and user friendly.

BASIC USE

1. Seal100-R as a sealer

- When applied to wet, green portland cement concrete, Seal100-R integrally waterproofs, densifies and preserves, attributes beneficial to concrete.
- Provides a tough breathable barrier just beneath the concrete’s surface porosity top and on the surface of the concrete.
- Provides concrete an effective ion barrier that preserves its imbedded steel.
- Penetrates to extraordinary depths and reacts with interior ingredients such as free alkali or unused calcium hydroxide residue and prolifically converts Seal100-R unusually low solids colloidal liquid to a

100% solid insoluble precipitant.

- The uniquely induced precipitant barrier does not generate any heat during its conversion from liquids to solids, nor expansion pressures at any time. It significantly decreases the potential vapor gas transmission rate.
- Because the internally generated barrier has extremely small porosity, it alleviates or eliminates transmission of gases such as radon, forcing them to seek other avenues of escape rather than passing through the concrete.
- Excellent primer application for surface toppings, paints, adhesives, etc.

2. Seal100-R as a cure

- An excellent alternative concrete curing method providing a cure equal or better than water curing.
- Provides usual benefits of curing agent, and provides special ingredients to the yet-available capillary mix water, waiting to participate in hydration reaction process in plastic or semi plastic concrete.
- Generates increased volume of cement paste or hydration products in a much shorter time and utilizes all of the remaining capillary water and leaving none to later evaporate and leave void spaces.
- Seal100-R provides concrete a superior cure imparting extraordinary strength, surface

hardness and impermeability, subsequently to get much improved durability.

- Provides concrete formulated permanent subsurface precipitate barrier containing smaller pore sizes than concrete’s micropores that even further diminishing porosity and permeability effectively forcing gases such as radon to seek other avenues of escape, instead of passing thru the concrete, where applicable.
- Does not leave a surface residue to interfere with surface bonding quality.
- Produces concrete more waterproof, abrasion resistant, freeze damage resistant, dust resistant, acid/chemical resistant, etc.

PRIMARY APPLICATIONS

- Seal100-R is same as Seal100 application areas. However, Seal100-R will improve concrete inside and outside. i.e. excellent for use on streets, highways, pavement, bridges, parking deck, airport pavement, dams, pavers, tunnels, basement, etc.

FEATURES AND BENEFITS

- Permanently integrally waterproofs concrete (Both inside and outside).
- Densifies, strengthens, and internally detoxifies concrete.
- Excellent coating or topping primer.
- Provides internal humidity stability.
- Increases surface abrasion resistance, acid/chemical resistance.
- Improve thermal resistance, surface bond quality, dusting resistance, past carbonation effects.

- Zero VOC or VOS content
- Easy ice removal and cleaning
- Lowers internal chemical reaction potential, creep deformation potential, and electrostatic discharge potential.
- Concrete’s best durability.
- Improves freeze-thaw cycle damage.
- Makes surface more crack resistant.
- Resists oil and water penetration to beneath the treated surface.

DIRECTIONS FOR USE

1. On Existing Concrete

Note: In hot climates, mist-wet the surface with water and remove any puddles prior to application.

- Use medium to high-pressure airless sprayer complete with a 24 inch wand and 0.019 inch fan tip spray jet.
- Hold spray tip 6 inches from concrete surface.
- Apply at the rate of 200 square feet per gallon with an overlapping spray pattern of 10-20%.
- Begin applying at the lowest level elevation. For example, walls and slopes should be applied side to side, from the bottom up.
- Surface paint, wax or anything else must be chemically or mechanically removed before spraying.
- Do not apply Seal100-R when temperature is near freezing.
- Highly water saturated wall (basement) should be 2 times spray with 7 to 14 days interval (Ventilation should be provided).
- When applying any coating on surface, wait 24 hours after sealing with Seal100, then

flush surface with water and allow to dry before coating.

- Do not puddle or build up can occur, causing a darkening effect.
- Use only on green or recently poured clean concrete. Seal100-R will seal in any visible stains and bring hidden contaminants to the surface.

2. As a curing method

- Use a low-pressure non-atomizing spray apparatus such as a pump-tank sprayer or mechanical cure slurry pump or equivalent.
- Apply to the newly poured concrete surface as soon as is practical following its surface finish. Concrete should be allowed the time to adequately harden, so as not to imprint or mar its surface during application.
- Applying coverage rate is 150 to 200 square feet per gallon for broom finish concrete; 300 to 350 square feet per gallon on hard or steel troweled concrete.

TECHNICAL DATA

- Physical : Liquid
- Color : Cloudy-white (dries clear)
- Odor : None
- pH : \pm 12
- Flammability : None
- Hazardous Vapors : None
- Clean-up Solvent : Water
- U.V. Resistance : Excellent
- Surface Bond Quality : Excellent
- Chloride Screen ability : Excellent
- VOC/VOS Compliant : Yes

PACKAGING

Seal100-R is packaged in

- 5 U.S. gal pails
- 55 U.S. gal drums.

PRECAUTION

- Any coatings that may restrict access to the concrete's interior must be chemically or mechanically removed for Seal100-R to penetrate.
- Protect areas not intended for coverage.
- Do not allow Seal100-R puddle or buildup can occur, causing a darkening effect.
- Seal100-R may etch glass or dull shiny aluminum and can be difficult to remove from other surfaces once it dries.
- Do not apply on frozen substrate or when temperature is near freezing.
- Seal100-R spray mist is not hazardous to breathe. However, we do recommend the use of a face mask during application. Refer to MSDS.
- For more information read Material Safety Data Sheet.