# **EUCO-GUARD 100**

SOLVENT-BASED, SILOXANE WATER AND CHLORIDE REPELLENT FOR CONCRETE AND MASONRY



## **DESCRIPTION**

EUCO-GUARD 100 is a deep penetrating siloxane sealer designed to protect concrete structures, decks, pavements and surfaces against the adverse effects of de-icing salts, moisture, weathering and freeze damage. EUCO-GUARD 100 reacts chemically with the concrete to provide a highly effective chloride screen and water barrier. In addition to its ease of application, EUCO-GUARD 100 has the added versatility to be used on both new and old concrete surfaces.

# **PRIMARY APPLICATIONS**

- Parking structures
- · Lane barriers & ramps
- Bridges

- Marine platforms
- Auto/truck repair bays
- Exterior concrete surfaces

#### **FEATURES/BENEFITS**

- Provides an efficient, continuous chloride barrier
- Blocks pores and capillaries for outstanding water repellency
- May be applied to new or old concrete
- Suitable for use over dry or damp (not saturated) concrete
- Full protection in one treatment, but may be reapplied later at any time
- Provides a low cost protection system over the life of a structure
- Protects reinforcing steel against the corrosive effects of surface absorbed chlorides and moisture
- Renders new concrete virtually free of surface scaling
- · Extremely high alkali resistance

# **TECHNICAL INFORMATION**

| PROPERTIES                 | VALUE   |  |  |
|----------------------------|---|--|--|
| Drying Time                | Dry-1 to 2 hrs<br>Foot traffic- 4 to 6 hrs<br>Wheel traffic- 10 to 12 hrs |  |  |
| Туре                       | Siloxane  |  |  |
| Flash point                | 41°C  |  |  |
| Active Content (by weight) | 10%   |  |  |
| VOC content                | 730 g/L   |  |  |
| Solvent                    | mineral spirits   |  |  |

**Appearance:** EUCO-GUARD 100 is a clear, solvent based material. After placement and drying, the product has virtually no effect on the appearance of dry concrete. EUCO-GUARD 100 treated concrete will cause water to "bead" at the surface.

| NCHRP 244 Series IV @ 21 days                |        |  |  |
|--|--------|--|--|
| 27.6 MPa, 76 mm x 152 mm cylinders 5.25% air |        |  |  |
| entrainment, 15% NaCl solution               |        |  |  |
| Reduction in water uptake                    | .92.5% |  |  |
| Reduction in chloride ion uptake             | .96.0% |  |  |

|                   | ASTM C642<br>WATER ABSORPTION<br>24 HOURS RESULTS |                     | ASTM C672<br>SCALING<br>RESISTANCE |                 |
|-------------------|---|---------------------|------------------------------------|-----------------|
|                   | % WEIGHT<br>GAIN                                  | WATER<br>REPELLENCY | 50<br>CYCLES                       | 125<br>CYCLES   |
| Untreated         | 4.85%   |                     | Moderate<br>to serve               |                 |
| Euco-Guard<br>100 | Siloxane  | 92%<br>scaling      | 0 to no                            | 0 to no scaling |

#### **PACKAGING**

EUCO-GUARD 100 is packaged in 210 L MS drums, 20 L MS pails and 5 L MS pails



#### SHELF LIFE

12 months in original, unopened container

#### **SPECIFICATIONS/COMPLIANCES**

EUCO-GUARD 100 meets the performance standards of NCHRP 244 Series IV

Complies with Federal AIM Rule VOC regulations

# **COVERAGE**

| CONCRETE SURFACE | APLICATION RATE                            |
|------------------|--|
| Trowelled smooth | $3.1 \text{ to } 3.7 \text{ m}^2/\text{L}$ |
| Broomed textured | 1.8 to 3.1 m <sup>2</sup> /L               |

**Material Requirements:** A one coat application using a coverage rate of 3.1 m<sup>2</sup>/L will require approximately 30.3 L of material per 92.9 m<sup>2</sup> of area. For exterior concrete with a textured finish, a coverage rate of 1.8 to 3.1 m<sup>2</sup>/L is required to achieve NCHRP #244 results. Higher coverage rates may be used depending on surface porosity and desired level of protection.

#### **DIRECTIONS FOR USE**

**Surface Preparation (New Concrete):** Surface should be well cured a minimum of 3 days using water, wet burlap, polyethylene, curing paper, or a dissipating curing compound such as KUREZ DR VOX. Surfaces must be free of all dirt and debris. All joint sealants and caulks should be in place before applying EUCO-GUARD 100.

**Surface Preparation (Old Concrete):** Remove all foreign substances that could prevent absorption-dirt, dust, tar, oil, etc. Pressure wash with water and cleaners where appropriate. Membranes of any kind must be removed.

**Mixing:** EUCO-GUARD 100 is a one component material which requires no pre-blending prior to use. The product should be used directly from the container.

**Placement: Horizontal Surfaces** - Flood surface using low pressure, non-atomizing, airless sprayer, roller, brush or broom. Broom or squeegee material around for even distribution. Let the surface absorb the EUCO-GUARD 100 solution and follow immediately with a second application before the surface dries. Redistribute any puddles or free-standing EUCO-GUARD 100. Vertical Surfaces - Apply by low pressure, non-atomizing, airless sprayer, roller or brush in two applications from the bottom up. Be sure to apply "wet-on-wet" as described for horizontal surfaces. To apply the sealer to concrete, use a pump-up or airless sprayer for best results. A short nap roller or lambswool applicator may also be used.

## CLEAN-UP

Use EUCO SOLVENT or acetone to clean tools and equipment.

# **PRECAUTIONS/LIMITATIONS**

- Keep EUCO-GUARD 100 away from open flames, sparks, or other sources of ignition
- EUCO-GUARD 100 is a solvent-based product with a distinct odor. When used in enclosed areas or on
  extremely porous substrates, the solvent odor may dissipate slowly. If HVAC intake ducts will distribute solvent
  odor into adjoining occupied areas of the building, care should be taken to block these ventilation vents. If
  solvent odor is unacceptable, use a water-based product such as BARACADE WB 244.

- Do not dilute EUCO-GUARD 100 with solvents or thinners.
- Protect metal, glass and other surfaces from overspray.
- Do not use at temperatures below 4°C.
- Do not use over water saturated surfaces or curing membranes.
- All joint sealants and caulks should be in place before applying EUCO-GUARD 100.
- Do not allow to puddle. All product should penetrate the substrate with no surface build-up.
- Do not apply if rain is expected within 8 hours.
- This product does not prevent oil stains or discoloration from fallen tree leaves.
- A small (6' x 6') test area is strongly recommended prior to starting full application, in order to ensure desired
  performance results, aesthetics, and coverage rates. Allow 5 to 7 days for product to fully react before
  evaluating.
- In all cases, refer the Safety Data Sheet before use.

