

KlereSeal® 940-S VOC

Silane Penetrating Sealer

Specification Data Sheet



BASIC USES

• Klere-Seal® 940-SVOC can be used to protect parking decks and garages, ramps, roads, bridges, airport runways, stadiums, monuments, statues, buildings, dams, bulkheads, foundations, precast and prestressed concrete products, brick and stone veneers from structural damage and the negative effects of contamination.

2. MANUFACTURER

Pecora Corporation
165 Wambold Road
Harleysville, PA 19438
Phone: 215-723-6051
800-523-6688
Fax: 215-721-0286
Website: www.pecora.com

3. PRODUCT DESCRIPTION

Klere-Seal® 940-SVOC is a colorless alkylalkoxysilane solution that reacts chemically with siliceous materials to provide a permanent* hydrophobic surface to concrete and a variety of masonry substrates. Klere-Seal® 940-SVOC is not a coating, and as a result will not discolor or change the surface appearance in any way. Because silane molecules are very small, Klere-Seal® 940-SVOC is able to penetrate more deeply than other types of masonry sealers. Upon reaction with minerals in the substrate, Klere-Seal® 940-SVOC forms a barrier against water effectively reducing structural damage that could occur from trapped water. By reducing the incidence of water penetrating the substrate, Klere-Seal® 940-SVOC reduces the intrusion of water borne contaminants such as salt and dirt, and reduces the negative effects of these contaminants such as corrosion of steel reinforcement bars, spalling, scaling, efflorescence, leaching, and staining. The excellent penetration properties of Klere-Seal® 940-SVOC also leaves little exposure to wear when subjected to vehicular traffic. Ref: Alberta, Canada, Department of Transportation

Specification Test results.

Limitations: Klere-Seal® 940-SVOC is designed to react with acidic or alkaline siliceous substrates. The active ingredients in the sealers may not chemically react with neutral pH substrates. Thus, they may not provide water repellency to limestone, marble and some types of brick and stone. Klere-Seal® 940-SVOC is not expected to prevent water intrusion through visible cracks of 10 mils (0.25 mm) or larger and is not designed for use on surfaces experiencing hydrostatic pressure.

Klere-Seal® 940-SVOC uses alcohol as the carrier. Alcohol is a water miscible solvent which permits the sealer to be applied to damp substrates. It is also non-reactive to asphalt-based and plastic materials. Because of its high flash properties, it dries quickly; thus under certain conditions contributing to a loss of silane solids due to excessive evaporation. Special order Klere-Seal® 940-SVOC is available with mineral spirits as the carrier solvent. Mineral spirits is not compatible

PACKAGING

- 5-gallon (18.9 L) pails
- 50-gallon (189.3 L) drums

Color

- Clear-Water White

with water and may not penetrate as deeply as alcohol. Under hot and/or windy application conditions, mineral spirits has an advantage because this solvent has low flash properties with a resulting slower drying time and less loss of solids to evaporation.

4. TECHNICAL DATA

Applicable Standards: Meets National Cooperative Highway Research Program Report 244, Concrete Sealers for Protection of Bridge Structures; ASTM C672 De-icer Scalling Test; National Volatile Organic Compound Emission Standards for Consumer and Commercial Products as Waterproofing Sealer and Treatment. Consult Typical Physical Properties Chart.

TYPICAL PHYSICAL PROPERTIES

| Test Property | Value | Test Procedure |
|--|----------------|-------------------------------|
| Solids (%) | 50 | ASTM D-1644 |
| Carrier Solvent | Alcohol | Pecora Corporation |
| VOC Content (g/L) | 400 | ASTM D-3960 |
| Weight/Gallon (lbs./gal.) | 6.9 | Pecora Corporation |
| Flash Point (°F (°C)) | 78 (26) T.C.C. | ASTM D-56 |
| % Reduction Weight Gain (125 sq ft/gal) | 90.8 | NCHRP #244 Series II |
| % Reduction Chloride ion (125 sq ft/gal) | 89.6 | NCHRP #244 Series II |
| Penetration, mm (125 sq ft/gal) | 6.35 | OHD-L-34 |
| Water Repellency, (%) | | Alberta DOT Test Procedure |
| -Initial | 81.2 | |
| -After Sand Blasting | 88.5 | |
| % Water Absorbption (after 48 hrs) | | ASTM C-642 |
| -Control | 3.62 | |
| -Treated | .32 | |
| % Water Absorbption (after 50 days) | | ASTM C-642 |
| -Control | 4.16 | |
| -Treated | .99 | |
| Scaling Resistance (75 cycles) | 5 Rating | ASTM C-672 |
| % Moisture Loss (125 sq ft/gal) | 102 | Ok DOT MVT/Permeability, L-35 |

*The water repellency of Klere-Seal is permanent as long as the surface is not worn away beyond the level of sealer penetration.

Since Pecora architectural sealants are applied to varied substrates under diverse environmental conditions and construction situations it is recommended that substrate testing be conducted prior to application.

5. INSTALLATION

Preparatory Work: Surfaces to receive Klere-Seal® 940-S VOC should be clean and grease and oil free. All standing water should be removed. Klere-Seal® 940-S VOC can be applied to a damp or dry surface although dry conditions are preferred to facilitate maximum penetration for optimum performance

Application: Klere-Seal® 940-S VOC should not be applied at temperatures below 32°F (0°C), or when the temperature is expected to fall below 32°F (0°C) within 12 hours of application.

The recommended application equipment is a low pressure, airless type sprayer; however, a brush or roller may be used. When a brush or roller is used, repeated applications should be made until the surface remains moist for a minute or so before the solution disappears. Apply Klere-Seal® 940-S VOC until the solution runs or stands. On vertical surfaces, proper quantities have been applied when excess solution runs 6 to 8 inches (152 mm to 203 mm) below the spray pattern before penetrating the surface. Proper quantity on horizontal surfaces is indicated when the solution stands for a few seconds before completely penetrating. Because the porosity of different substrates varies greatly, Pecora is not responsible for any shortfalls or excess coverages based on the above estimates. For precise rates of coverage, a pre-application field test should be performed.

Overspray: Do not spray on windy days. Overspray on window plate glass can be removed by using soap and water immediately after application. For specialty glass or other non-cementitious materials, it is best to run preliminary testing before overspraying a large area. Protect plant life. Keep containers tightly closed when not in use. Exposure to moisture prior to use will cause product degradation.

Cleaning: Thoroughly clean all equipment and clothing after use, either with solvent or water.

Shelf Life: One year from the date of manufacture when stored in original unopened containers at temperatures lower than 80°F (26°C).

ESTIMATED COVERAGE RATES

| | Per Gallon | |
|---|-------------|---------------|
| | Square Feet | Square Meters |
| Exposed Aggregate | 115-175 | 11-16 |
| Stucco | 115-175 | 11-16 |
| Porous Concrete | 115-175 | 11-16 |
| Smooth Concrete (Precast) | 145-200 | 13-19 |
| Smooth Concrete (Steel Trowel Finish) | 175-230 | 16-21 |
| Exterior Brick | 115-175 | 11-16 |
| Concrete Brick | 85-145 | 8-13 |
| Concrete Block | 60-115 | 5-11 |
| Rough Stone (Sandstone) | 115-175 | 11-16 |
| Smooth Stone Stone (Polished Granite) | 175-230 | 16-21 |
| Bridge Decks and other Surfaces Subject to Abrasion | 115-175 | 11-16 |

Precautions: Flammable - Contains alcohol. Do not store or use Klere-Seal® 940-S VOC near heat, sparks or open flame. Do not smoke in the vicinity where Klere-Seal® 940-S VOC is being applied. Use in well-ventilated areas or wear an air supplied respirator. Always wear protective goggles and gloves. If inhaled, move at once to fresh air. If breathing falters or stops, give artificial respiration, preferably mouth-to-mouth, and call a physician. In case of skin or eye contact, flush immediately with warm water for 15 minutes. Remove contaminated clothing. Refer to Material Safety Data Sheets.

**FOR PROFESSIONAL USE ONLY.
KEEP OUT OF THE REACH
OF CHILDREN.**

6. AVAILABILITY AND COST

Pecora products are available from stocking distributors nationwide. For the name and telephone number of your nearest representative, call the number below or visit our website at www.pecora.com.

7. WARRANTY

Pecora Corporation warrants its products to be free of defects. Under this warranty, we will provide, at no charge, replacement materials for, or refund the purchase price of, any product proven to be defective when used in strict accordance with our published recommendations and in applications considered by us as suitable for this product. The determination of eligibility for this warranty, or the choice of remedy available under this warranty, shall be made in our sole discretion and any decisions made by Pecora Corporation shall be final. This warranty is in lieu of any and all other warranties, expressed or implied, including but not limited to a warranty of merchantability or fitness for a particular purpose and in no case will Pecora be liable for damages other than those expressly stated in this warranty, including but not limited to incidental or consequential damages.

8. MAINTENANCE

None required. Surfaces may be retreated at the end of service life.

9. TECHNICAL SERVICES

Pecora representatives are available to assist you in selecting an appropriate product and to provide on-site application instructions or to conduct jobsite inspections. For further assistance call our Technical Service Department at 800-523-6688.

10. FILING SYSTEMS

- Sweet's Catalog File: www.sweets.com
- General Building
 - 07100 Waterproofing
 - 07920 Sealants
- Civil Engineering
 - 07100 Waterproofing

