

APPLICATION GUIDE Version 4.0

SILOXAGUARD™

PAVE CHEM®
SEALERS, CLEANERS and ADHESIVES

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SILOXAGUARD is a water-based siloxane penetrating sealer that will protect without changing the natural look of the pavers. It is manufactured using the finest siloxanes of the different silane and siloxane derivatives of silicone. *SILOXAGUARD* will provide stain protection for interior and exterior clay and concrete pavements and most vertical masonry structures. *SILOXAGUARD*, on most products, will not change the appearance. When applied, it will penetrate up to ¼” while still allowing water vapor to escape through the surface. This is especially important when working with clay products and some natural stone. Clay needs to “breathe” and coating sealers will not allow vapor transmission, which overtime may cause damage or delaminating of the coating, or both.

- *SILOXAGUARD* is recommended for use around pool decks.
- *SILOXAGUARD* can be used to protect natural stone pavements.
- *SILOXAGUARD* is recommended for interior applications when no change of appearance is desired.
- *SILOXAGUARD* can be used to seal the face of Retaining Wall blocks (it will NOT stop or prevent efflorescence from occurring).
- *SILOXAGUARD* will *not* act as a sand stabilizer.

Before using *SILOXAGUARD*, it is necessary to determine if the concrete or clay pavement should be sealed with *SILOXAGUARD*.

- Do NOT apply *SILOXAGUARD* if the pavers have not been installed for AT LEAST 3 months (see “WHAT IS EFFLORESCENCE?” Section for explanation)
- Do NOT apply *SILOXAGUARD* if the pavers have not been cleaned with *PAVERPREP* or other cleaner specifically designed for pavers. NEVER use muriatic acid. Muriatic acid is a byproduct of the leather tanning industry. There are contaminants in it that may stain the pavers and there is no control of the strength of the acid. This may cause etching of the pavers if too strong or unsuccessful removal of efflorescence if too weak.
- Do NOT apply *SILOXAGUARD* to pavers that have been previously sealed with anything other than *SILOXAGUARD* without first checking and testing for product compatibility.

SILOXAGUARD Instructions

CAUTION!

Before using *SILOXAGUARD*, be sure to read this entire application guide. Make sure to check tightness of lids before transport or handling. Avoid contact with skin and eyes. **Always wear protective glasses, gloves and boots.** Prolonged contact with skin can cause skin irritations. Keep out of reach of children. Shield buildings, landscaping and vehicles from spray drift. Dispose of empty containers according to federal, state and local regulations.

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Apply only **ONE COAT** of undiluted *SILOXAGUARD*.

Coverage:

Sprayer: Coverage when spraying with a low pressure sprayer is approximately 140-160 sq ft per gallon. When using a sprayer to apply *SILOXAGUARD*, do not use one that has been used with other chemicals (including other PAVE CHEM products) unless it has been thoroughly cleaned. Coverage varies based on porosity of the surface and width of the joints.

Roller: When rolling on *SILOXAGUARD*, coverage is approximately 80-100 sq ft per gallon. Be sure to use new, medium nap rollers for the application. Again, porosity of the surface and joint widths affect coverage.

Preparation:

1. Make all repairs to the pavement and conduct a thorough cleaning using PAVE CHEM's *PAVERPREP* (also use *PAVERDETERGENT* and/or *PAVERDE-STAINER* as necessary). See the *PAVERPREP* Application Guide for these instructions and procedures.
2. Once the surface is cleaned, barricade the pavement and keep all traffic off. Make sure that the tops and joints of the pavers are dry before starting application. After cleaning, this will take 24-48 hours, or longer, depending on temperature and humidity. Make sure that all sprinkler systems are turned off. If it rains within the 24-48 hour drying time, start the clock over. If there is still some moisture present in the joints, it is OK to start application. However, the drier the pavement, the better the depth of absorption of the siloxanes.
3. When the pavers and joints are dry, check the weather forecast. Do not start applying *SILOXAGUARD* if rain is anticipated in the next 12 hours. Curing will take longer in colder temperatures; application is not recommended below 45°F (7°C).
4. A small application test should be done in an inconspicuous area BEFORE full application to make sure that the sealed appearance is acceptable. Some types of masonry materials may show a color darkening.

Application (Sprayer):

1. **Pavers and joints should be dry.** Start at the HIGHEST elevation of the pavement. Spray side to side working toward the bottom of the pavement. Be sure to cover all areas equally, saturating the surface almost to the point of runoff. This will give you the best possible absorption of the siloxanes and your best protection. When working next to a building or retaining wall, hold up a piece of cardboard or other material to shield from overspray. When spraying near edges with grass, try to angle the tip back toward the pavement to reduce overspray on grass. If there is excessive overspray or run-off, there may be some browning of the grass, but it will come back after 1-3 weeks.
2. Do NOT apply a second coat. The *SILOXAGUARD* will only penetrate so far into the pavers. A second coat will not provide any extra protection.
3. After the entire pavement has been sprayed, barricade the pavement to keep all vehicle traffic off for 24 hours. Foot traffic is usually allowed after about 4-8 hours.

Note: Almost any type of low pressure sprayer should work fine for applying the *SILOXAGUARD* (including garden sprayers). If it is a used sprayer, make sure that the tank, hose and wand have been thoroughly cleaned and allowed to dry before using with *SILOXAGUARD*.

Application (Roller):

1. If using a paint roller to apply *SILOXAGUARD*, purchase new, high quality medium nap rollers. Place a sheet of plywood on the pavers and put your paint tray on top. The plywood will prevent excessive *SILOXAGUARD* from spilling on the pavers when filling the tray or when dipping the roller.

2. **Pavers and joints should be dry.** Start at the HIGHEST elevation of the pavement. Roll on the *SILOXAGUARD* working side to side toward the bottom of the pavement. Be sure to overlap each pass and apply enough sealer to saturate the surface. When working next to a building or retaining wall, hold up a piece of cardboard or other material to protect from the roller. There is not a problem of over-rolling the surface, but it is best to evenly apply the sealer and move on.
3. Do NOT apply a second coat. The *SILOXAGUARD* will only penetrate so far into the pavers. A second coat will not provide any extra protection.
4. After the entire pavement has been rolled, barricade the pavement to keep all vehicle traffic off for 24 hours. Foot traffic is usually allowed after about 4-8 hours. If there was some *SILOXAGUARD* run-off into the yard, there may be some browning of the grass along the edge of the pavement, but it will come back after 1-3 weeks.

Clean-Up:

1. If a roller was used to apply *SILOXAGUARD*, wash the roller, handle and paint tray with water and allow too dry.
2. If a sprayer was used, spray any unused sealer back into a *SILOXAGUARD* container.
3. Pour approximately 1 pint of water into the sprayer tank and put the plunger back on. Shake the tank to rinse off all the sealer inside the tank.
4. Pump up the sprayer and discharge the water on top of gravel or cardboard. It is non-toxic, but may cause some browning if sprayed on the grass.
5. Remove the plunger again, then hold the sprayer wand up vertically and open the valve (trigger) to drain wand and hose back into the tank. Pour any remaining water out of the tank.
6. Use a cloth rag and some water to wipe down the top and outside of the tank, plunger, hose, wand and seals. Disassemble the tip from the wand and wash it thoroughly with water.
7. Allow the tank and all sprayer components to dry (lay the tank on its side for faster drying). Then put the tip back on the wand and put the plunger back on the tank to keep dirt out.
8. All empty containers of *SILOXAGUARD* should be left open and allowed to dry (do not allow rain to enter containers). When dry, they can be disposed.
9. Make sure that the lids are securely fastened on any unused containers of *SILOXAGUARD* before transporting or storing.

REAPPLICATION:

SILOXAGUARD does not “wear” away like a coating sealer. Penetrating sealers, such as *SILOXAGUARD*, *evaporate* from the surface very slowly. It is recommended that resealing with *SILOXAGUARD* is performed every 1 – 2 years to maintain the best possible protection.

WHAT IS EFFLORESCENCE?

PAVE TECH, INC. recommends waiting 3 months before cleaning and sealing a new installation. If efflorescence is severe upon installation of the pavers, they can be cleaned with *PAVERPREP* to improve the appearance, but the pavers should be cleaned again with *PAVERPREP* just before the first sealing even if no further efflorescence is apparent. The reason for waiting to clean and seal is efflorescence and secondary efflorescence.

Efflorescence is a natural byproduct of all curing concrete and occasionally appears in clay products. It is the white haze or “chalky” substance on top of the pavers. Commonly, efflorescence shows more on darker colored pavers, especially a charcoal color. Efflorescence is mainly a cosmetic issue; it does not affect the structural integrity of the paver. It is brought to the surface by the slow evaporation of water through the paver. As water enters the microscopic capillaries in the pavers, it reacts with the calcium oxide and forms calcium hydroxide. This is raised to the surface during a slow evaporation and forms the white haze. When the supply of calcium oxide is exhausted, efflorescence will stop. Over time, it will usually wear off the pavers naturally.

Because efflorescence will only surface during slow evaporation, the process will take longer in dry conditions. The process can be sped up by watering the pavement in the evening every 2 or 3 days, but this could also cause other problems from hard water or rust in the water.

Another concern is possible secondary efflorescence caused by the material under the pavers, including the bedding sand, base material and even the soil below the base material. Water can react with any calcium oxide in these materials and surface on top of the pavers. This will take longer to occur. If the pavers are sealed with *SILOXAGUARD* without removing the efflorescence first, it will still be visible after the sealer has dried. It will now be trapped by the sealer and can not be removed. *PAVERPREP* is only used before the first time pavers are sealed. It has little or no effect on the sealed pavers before future applications. In some cases, once the sealer has completely evaporated, it may be possible to remove efflorescence with *PAVERPREP*.

Separate Application Guides and MSDS Sheets are available for *PAVERGUARD*, *PAVERECOGUARD*, *PAVERPREP*, *PAVERDETERGENT*, and *PAVERDE-STAINER*. Contact your dealer or PAVE TECH for a copy. They are also available for downloading at www.pavetech.com.

Wait at least 3 years after the last application before trying *PAVERPREP*.

DISCLAIMER:

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