

KEY #303 UV-GUARD DENSIFIER/SEALER



Product Data Sheet

DESCRIPTION

KEY #303 UV-GUARD DENSIFIER/SEALER is a water-based, clear polymeric and lithium silicate solution formulated to densify, seal and dustproof concrete floor slabs with the added benefit of improved stain resistance and UV absorbers to protect colored or dyed concrete against UV degradation. **KEY #303 UV-GUARD** absorbs and chemically reacts with calcium silicate hydrate (CSH) in the concrete pores, providing a very hard and dense surface with improved durability and resistance to water and mild chemicals. **KEY #303 UV-GUARD** can be used alone or in combination with **KEY #302-LI+** to seal many types of interior concrete floors with a glossy and protective finish, including manufacturing plant and warehouse floors, distribution center floors, transportation terminal floors, commercial and retail floors, institutional floors, and numerous other uses.

KEY ADVANTAGES

- Seals, densifies and dustproofs concrete, gloss finish
- Protects colored or dyed concrete from UV degradation
- Waterborne, low odor suitable for use in occupied areas
- Meets USGBC LEED criteria for low VOC
- Treated concrete is more dense and durable
- Easier to clean and maintain vs. untreated concrete
- Improved abrasion resistance vs. untreated concrete

KEY CONSIDERATIONS

- Substrate temperature must be a minimum of 40°F
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials
- Protect metal, glass, wood, paint or brick from contact with **KEY #303 UV-GUARD**, if oversprayed clean immediately with clean water and cloths
- Protect **KEY #303 UV-GUARD** from freezing
- The stain resistance of **KEY #303 UV-GUARD** gradually develops over the first 5-7 days after application and is greatly increased by burnishing. Prevent spills as much as possible during this time.
- Acid-stained concrete must be thoroughly neutralized before application of **KEY #303 UV-GUARD**

COLOR SELECTION

Clear only.

COVERAGE

500-1000 ft² per gallon depending on surface porosity and texture of the concrete surface. The actual coverage rate required to achieve the desired finish should be determined with an on-site mock-up.

CURE/DRY TIME

Dry to Touch 1-2 hours @ 75°F, 50% RH

Exposure to Water 72 hrs @ 75°F, 50% RH

APPLICATION

KEY #303 UV-GUARD is used directly from the container and requires no dilution or pre-mixing, it may be diluted 1:1 with clean potable water when applying in dry or windy environments to avoid premature drying of the product and streaking during application. Work must be performed by trained or experienced contractors or maintenance personnel. The **Key Resin Technical Service Department** is available to answer any questions.

Surface Preparation (New/Fresh Concrete): Cure the concrete by a wet or sheet cure method in accordance with ASTM C171, or with a curing compound that meets the requirements of ASTM C309, a dissipating curing compound is recommended. To maximize strength and other physical properties of the concrete slab, new concrete should cure seven days or longer before application of **KEY #303 UV-GUARD**. For fast track projects, the cure time may be reduced at the discretion of the project engineer. If a curing compound is used, it must be completely removed before application of **KEY #303 UV-GUARD**. After the curing method is removed, allow the slab to air dry a minimum of 24 hours prior to application. Insufficient drying of the concrete will prevent full penetration of **KEY #303 UV-GUARD**, reducing its effectiveness.

Surface Preparation (Old Concrete): Concrete must be clean and free of any materials that could prevent penetration of **KEY #303 UV-GUARD**, such as curing compounds or cure & seal treatments, paints, coatings, dirt/oil, waxes, etc. If necessary, use a chemical cleaner/stripper to remove these contaminants before applying **KEY #303 UV-GUARD**. **Note: The performance of KEY #303 UV-GUARD is maximized when applied to concrete already densified with KEY #302-LI+.**

Application (New or Old Concrete): Air temperature during application must be between 40°F and 100°F (5°C and 38°C). Prior to application, if the concrete is very absorptive a light misting with water is recommended for a more uniform coverage and appearance—do not apply over standing water. Apply a single coat of **KEY #303 UV-GUARD** using a pump-up low pressure sprayer at a coverage rate that results in a uniformly wet surface without puddles. Immediately while **KEY #303 UV-GUARD** is still wet, use a microfiber pad to evenly spread out the material.

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APPLICATION - (Continued)

Ensure that the coverage rate is followed - do not apply too heavily. Keep a wet edge and do not overlap over dried areas to avoid lap marks. Allow the **KEY #303 UV-GUARD** to dry tack-free, about 30-60 minutes, then buff or burnish as desired. Best shine and stain resistance is achieved with a high speed burnisher equipped with a soft pad. Up to three coats can be applied following the same technique - spray, spread, let dry, then burnish. Under normal conditions, the floor will be traffic ready approximately one to two hours following final burnishing. Do not expose the floor to water for 72 hours.

Floor Joints: If the floor joints are to be filled after **KEY #303 UV-GUARD** has been applied, they must be thoroughly cleaned before installation of joint filler. Cleaning joints by circular concrete saw or a grinder equipped with a wire wheel is recommended.

Clean-Up/Safety: Clean brushes, tools, equipment and flush sprayer with clean potable water immediately after use. Consult Safety Data Sheet (SDS) for safety and health precautions.

TECHNICAL DATA

Mixing Ratio	Single Component
Solids Content	21-23% Solids
Volatile Organic Content (VOC) (EPA Method 24)	111 g/L
pH	9.5 - 10.5
Shelf Life	1 year, unopened container
Stain Resistance	Contact Key Resin Technical Service
Thinning	No thinning is required. Can thin 1:1 with water in dry/windy conditions

WARRANTY

Key Resin Company ("Key") warrants for a period of one (1) year that its products will be free of manufacturing defects and will be in conformity with published specifications when handled, stored, mixed, and applied in accordance with recommendations of Key. If any product fails to meet this warranty, the liability of Key will be limited to replacement of any non-conforming material if notice of such non-conformity is given to Key within (1) one year of delivery of materials. Key may in its discretion refund the price received by Key in lieu of replacing the material. No customer, distributor, or representative of Key is authorized to change or modify the published specifications of this warranty in any way. No one is authorized to make oral warranties on behalf of Key. In order to obtain replacement or refund the customer must provide written notice containing full details of the non-conformity. Key reserves the right to inspect the non-conforming material prior to replacement. EXCEPT FOR THE EXPRESSED WARRANTY STATED ABOVE, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. KEY'S OBLIGATION SHALL NOT EXTEND BEYOND THE OBLIGATIONS EXPRESSLY UNDERTAKEN ABOVE AND KEY SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO THE PURCHASER OR ANY THIRD PARTY FOR ANY LOSS, COST, EXPENSE, DAMAGE OR LIABILITY, WHETHER DIRECT OR INDIRECT, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

MAINTENANCE

After completing the application of **KEY #303 UV-GUARD**, the installer should provide the owner with maintenance instructions. Concrete treated with **KEY #303 UV-GUARD** is easily cleaned with neutral soaps or detergents, variable depending on surface porosity and texture. Refer to **Key Resin Technical Bulletin #3** and **#3A** for additional recommendations.

TECHNICAL SERVICE

Key Resin Company provides services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces. **Key Resin Sales/Technical Representatives** are available to assist you. Telephone 888.943.4532 or visit www.keyresin.com.

AVAILABILITY

Key Resin materials are available throughout the United States and a number of other countries. Contact the **Key Resin Representative** in your area for details.

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