

Product Description: BallistiX's Ranger -Interior Vinyl Floor Coating

BallistiX's Ranger Vinyl Surface Treatment is a single application silicon-ceramic coating that forms a continuous barrier across interior vinyl floors. This barrier provides maximum protection, prohibits microbial growth, resists staining and the effects of harsh chemicals. The end result provides a long lasting, glossy shine on the treated surface which eliminates the need for continuous waxing.

Suggested Uses:

Interior vinyl composition tile (VCT), engineered vinyl tile including luxury vinyl tile (LVT) and quartz vinyl tile (QVT), sheet vinyl, vinyl plank, welded seam vinyl and linoleum.

Surface Preparation:

The surface to be coated must be clean, 100% dry and free from dirt, oily residue, grime, spores (mildew) or any other surface contaminate that could affect product performance. It is imperative to fully and completely clean the surface, as BallistiX's Ranger adheres by covalent and mechanical bonding and must gain direct contact with the surface. First, clean the vinyl surface with PREP1 to remove all dirt, oils, and stains. Rinse area thoroughly with water. Next, clean the vinyl surface with PREP2 to remove all chemical and surfactant film residue. Finally, let the vinyl surface area completely dry prior to applying BallistiX's Ranger.

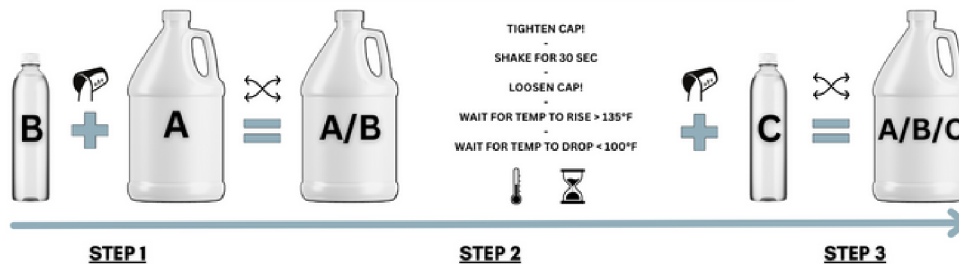
Mixing and Catalyzing of BallistiX's Ranger:

BallistiX's Ranger is a three-component mix with a flow agent additive added after catalyzation. The components must be properly mixed for curing to occur. This product is packaged, in 2 gallon kit form, with separate containers for the (A), (B), (C) components and flow agent additive (D). To mix gallon kits:

1. Pour Part (B) into the bottle labeled Part (A). Shake lightly for 20 seconds and set the bottle down.
2. Notice an exothermic heat reaction begins. This is normal and the bottle will reach about 135°F. Periodically remove the cap to release reaction vapors (alcohol). Shake lightly after 30 minutes. After 90 minutes, continue to step
3. Next, add the (C) component liquid into the admixture of the (A) & (B) components. Shake for 15 seconds and let sweat for 5 additional minutes before using. Pot life of mixed material is 6 days. Keep container closed when not in use.
4. Shake and transfer to sprayer.
5. Add up to 16 oz. flow agent additive (D) to sprayer and shake lightly.

BallistiX's Ranger Mixing Instructions

3-PART MIXING INSTRUCTIONS



STEP 1
Pour entire contents of Part B into Part A. Tighten the cap and shake for 30 seconds to help begin catalyzation process. After shaking, set the bottle down and loosen the cap to allow vapors to escape. It is imperative to loosen the cap immediately after shaking Parts A & B together. Otherwise, product won't catalyze properly.

STEP 2
Temperature of combined contents should reach 135°F or higher, but then drop back down below 100°F within an hour. Check thermometer included on bottle, or use a heat laser to monitor rising temperatures.

STEP 3
Once an hour has passed and temperature has dropped back down below 100°F, add Part C to the mixed Part A/B. Shake all three parts for 30 seconds. Allow mixed components to sit for 5 minutes before use.



Essential Tools and Supplies for Application:

1. 1-1/4 gallon Home and Garden Sprayer such as Greenwood Home and Garden Sprayer.
2. Rubbermaid Ergo Reach Microfiber Wet Mopping Kit.
3. Rubbermaid Q409 Standard Microfiber 18" Wet Mopping Pad:
 - a. Cut fiber not looped fiber pad, and
 - b. Pad must fit the frame to avoid drag and potential application issues.



Application of *BallistiX's Ranger*:

Spray: Fill garden sprayer with catalyzed *BallistiX's Ranger* and add up to 16 oz. flow agent additive (D) and shake lightly. Follow spray equipment instructions and use a small conical spray tip capable of laying down less than 1 -2 microns wet on vinyl surface. Spray a workable area that allows maintaining a wet edge during application. Apply with a standard cut microfiber pad (not looped fiber pad). Cut-in the corner and baseboard area and then use a figure 8 application motion to fill-in the field. Systematically work your way out of the room. **Do Not Mix or Apply:** if the temperature will drop below 50°F at any time during application or within 12 hours of product installation.

Tip#1: *Ranger* is a **Single Application**, so if the desired effect is not reached then clean the coating off with denatured alcohol before dry and recoat. This coating is designed to not stick to itself; therefore, a wet edge must be maintained.

Tip#2: To increase the dynamic coefficient of friction, use *Ranger* Anti-Slip Additive.

Safety Requirements:

Warning: Alcohol vapors are flammable. No smoking or hot work within 50 feet. Methanol vapors are hazardous. Assure sufficient ventilation and wear PPE 9 respirator. Protective eye wear, with side shields and protective gloves are also required when using *BallistiX's Ranger*. See SDS.

Clean Up:

Application tools and spray equipment should be cleaned with 100% pure denatured alcohol. Flush the pump hose, thoroughly until all product has been cleaned from the spray system. Remove the tip and nozzle and clean thoroughly. Clean up drips, spills or over spray with 100% pure denatured alcohol before the product dries. Always dispose of alcohol-saturated cloths in a safe and proper manner. During clean up/containment, wear protective clothing. Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide dikes or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as, clean water hosing, high-pressure power washing or steam cleaning.

Product Yield:

The yield of product is 1,000 sq. ft. per gallon on vinyl surfaces.

HANDLEABILITY, MIXING AND APPLICATION:

Pot Life: When all materials mixed, 6 days.

Film Thickness: 1-2 microns wet.

Curing Conditions: @ 73°F (23°C) and 50% R.H.

Dry Time: Touch: 40 mins, **Light Foot Traffic:** 4 to 6 hours, **Full Cure (chemical resistance and full abrasion resistance):** 5 days – all at 73°F, 50% RH.

SYSTEM PERFORMANCE (Typical Data):

VOC Content: 3.52 lbs./gal, 428 g/liter (Components A, B & C mixed).

Abrasion Resistance: 364 kg load 1000 cycles (ASTM C501), 1500 revolutions, class 3 rating (ASTM C1027).

Salt Spray: 4000 hours (face corrosion, face blistering) NONE. (ASTM B117).

Resistance to Microbial Fungi: Rating 0 (ASTM G2109).

Resistance to Staining: Class A (ANSI A137.1-2008) (ASTM C1378).

Coefficient of Friction: Dry: 0.79 (ASTM C1028).

Dynamic Coefficient of Friction: Wet: 0.49 (ANSI A137.1/A326.3).