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



Pour B into bottle A, tighten the cap, shake for 20 seconds. Set the bottle down and loosen cap to allow alcohol vapors to escape.

Temperature should reach 135°F or higher in 5 min. If the temperature is < 135°F, tighten cap, shake again set down and loosen cap.

After 30 minutes has passed, tighten cap and shake lightly again. Set bottle down, loosen the cap and allow bottle temperature to fall below 100°F (This can take up to an additional 60 minutes or more). (~90 min. total).

Add Part C into the admixture of the (A) & (B). Tighten cap and shake for 15 seconds. Loosen cap and let sweat for 5 additional minutes before using.

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 (ANSIA137.1-2008) (ASTM C1378).

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

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

1. Product Identifier

Product name: BallistiX's Ranger Vinyl Surface Treatment - PART A

PART A

Details of the Manufacturer/Supplier:

Meghan's Supply & Design 11724 Main Street, Suite 200

Fredericksburg, Virginia 22408 Phone: 540-840-9568 INFOTRAC: 800-535-5053 www.supplyndesign.com

Product Description: BallistiX's Ranger Vinyl Surface Treatment- Interior Single Application for Resilient Vinyl Floors

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.

2. Hazard(s) Identification

HMIS RATING:

Health: 1.

Flammability: 3. Reactivity: 0.

Classification of the Substance/Mixture: FLAMMABLE LIQUID, n.o.s.

Signal Word: WARNING!

Hazard Statement: May cause skin irritation. Harmful if inhaled. May cause respiratory irritation. Will emit vapors of methanol if seal is broken and mixture is exposed to moisture.

Hazard Pictograms:



Precautionary Statements: Keep out of reach of children. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection equipment as required. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally.

Hazards Not Otherwise Classified: None known.

3. Composition/Information on Ingredients

Substance/Mixture: Proprietary Mixture.

CAS Number	Wt%	Components	Exposure Limits
67-56-1	<1%	Methyl Alcohol	OSHA TWA 200 ppm, 260 mg/m ³ ; ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm
Proprietary Mixture	>98	Alkoxysilanes	None established; guide TWA 50 ppm

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4. First-Aid Measures

Inhalation: Remove to fresh air. Get medical attention if ill effects persist. **Skin Contact:** No first aid should be needed. Wash with soap and water.

Eye Contact: Immediately flush with water for 15 minutes.

Ingestion: Get medical attention. If conscious, induce vomiting. Lie down, keep warm and cover eyes to exclude light.

Comments: Treat same as Methyl Alcohol poisoning.

5. Fire-Fighting Measures

Flash Point: 46.9°F (8.3°C).

Extinguishing Medium: Carbon Dioxide (CO₂), Water Fog, Dry Chemical, Foam. **Unsuitable Extinguishing Medium:** Water, (closed containers may be cooled).

Fire Hazards: Static electricity may accumulate and ignite vapors. Prevent a possible fire hazard by suitable means, such as bonding, grounding, inert gas purge, vapor dilution and the like. Vapors are heavier than air and can travel along the ground to remote ignition sources.

Unusual Fire Hazards: Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Silicon Dioxide, Carbon Dioxide and traces of incompletely burned carbon compounds, Formaldehyde.

Fire Fighting Procedures: Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Heat exposure pressurizes closed containers. Evacuate the area in cases of overheating or fire. Runoff to sewer may create fire or explosion hazard. In case of fire, the following can be released: Carbon Dioxide, Carbon Monoxide (CO), Metal Oxides.

Special Protective Actions for Fire-Fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special Protective Equipment for Fire-Fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment as recommended in Section 8.

Methods and Materials for Containment and Clean Up: Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent possible spontaneous combustion, store rags, mops, absorbent, etc.; used during clean up in appropriate containers covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as washing with mild, caustic detergents or solutions; or high-pressure steam for large areas. Observe any safety precautions applicable to the cleaning material used.

7. Handling and Storage

Precautions for Safe Handling: No special precautions provided as long as containers are undamaged. Product evolves flammable Methyl Alcohol when exposed to moisture or humid air. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally. No eating, drinking, smoking, or hot work in work area.

Precautions for Safe Storage: Keep container closed and stored away from heat, sparks and open flame. Keep container closed and store away from water or moisture.

8. Exposure Controls/Personal Protection

Exposure Limits:

Components	Exposure Limits
Methyl Alcohol	OSHA TWA 200 ppm, 260 mg/m ³ ; ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm
Alkoxysilanes	None established; guide TWA 50 ppm

Engineering Controls: Local ventilation recommended.

Individual Protection Measures:

Eye Protection: OSHA approved safety glasses with side shields at a minimum.

Skin Protection: Washing at mealtime and end of shift, no special protection is needed. Rubber or latex gloves are adequate for

preventing skin irritation.

Respiratory Protection: Respiratory protection is not required provided adequate local exhaust ventilation is provided per recommended exposure guidelines. Avoid enclosed spaces for mixing or applying. When needed, use respiratory protection NIOSH ½ face, black cartridge, at a minimum.

Personal Protective Measures: Eye-wash station (bottle) should be within direct access of work area. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

9. Physical and Chemical Properties

Physical State: Liquid. Appearance: Clear.

Odor: Strong Odor (Methanol). pH: Not Applicable (non-aqueous). Solubility in Water: None. Boiling Point: >950°F (>350°C). Specific Gravity: @ 77°F (25°C): 0.95.

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

10. Stability and Reactivity

Reactivity: NA.

Chemical Stability: Stable.

Other:

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None.

Materials to Avoid: Concentrated nitric and sulfuric acids, strong oxidizers, aldehydes, halogens and halogen compounds.

11. Toxicology Information

Acute Health Effects:

Inhalation: Vapor may irritate nose and throat. Overexposure may cause drowsiness.

Ingestion: Product contains small amounts of Methyl Alcohol which may cause nausea, vomiting, abdominal pain, flushing of the face,

hypotension, weakness and loss of consciousness if large amount of product is swallowed.

Skin Contact: Causes skin irritation. **Eye Contact:** Causes eye irritation.

Prolonged/Repeated Exposure Effects:

Inhalation: Product generates Methyl Alcohol when exposed to moisture, which may cause blindness and damage to nervous system.

Ingestion: Product generates Methyl Alcohol, which may cause blindness and possibly death, if swallowed.

Skin Contact: May cause irritation, dermatitis. Eye Contact: May cause irritation; blindness.

Signs and Symptoms of Exposure:

Burning pain in the nose and throat (inhalation), pain, redness and tearing (eye exposure), itching or burning (skin exposure).

Special Hazards:

Carcinogens: None known.

Mutagens: None known.

Teratogens: None known.

Reproductive Toxins: None known.

Sensitizers: When heated to temperatures above 302°F (150°C.), in the presence of air, product can form formaldehyde vapors

(formaldehyde is a potential cancer hazard; a known skin and respiratory sensitizer and an irritant to the eyes, nose, throat, skin).

12. Ecological Information

Persistence and Degradability: Readily degradable. Main organic decomposition product (n-Butanol) is readily biodegradable; No persistence potential (OECD Guideline 111).

Bio Accumulative Potential: No potential for bioaccumulation (OECD Guideline 111).

Mobility in Soil: High mobility in soil based on high water solubility and estimated Koc 3.471 L/kg of degradation product n-Butanol.

Results of PBT and vPvB Assessment:

PBT: The substance is not PBT. **vPvB:** The substance is not vPvB.

13. Disposal Considerations

Disposal Methods: Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent possible spontaneous combustion, store rags, mops, absorbent, etc.; used during clean up in appropriate containers covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as washing with mild, caustic detergents or solutions, or high-pressure steam for large areas. Observe any safety precautions applicable to the cleaning material used.

RCRA Hazard Class (40 CFR 261):

When a decision is made to discard this material, as received, is it classified as a hazardous waste? Yes.

Characteristic Waste:

Ignitable: D001.

Observe all State or Local Laws pertaining to this class. Local laws may impose additional requirements.

Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned Packaging:

Recommendation: Disposal must be made according to official regulations.

AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION 8.







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14. Transport Information

UN Number: UN1993.

UN Proper Shipping Name: METHOXYSILANE/METHANOL.

Transport Hazard Class: 3.

Packing Group: II.

Environmental Hazard Name: FLAMMABLE LIQUID, n.o.s.

DOT Information: (49 CFR 172.1 01)

15. Regulatory Information

EPA SARA Title III Chemical Listings:

Section 304 CERCLA Extremely Hazardous Substance: None

Section 304 CERCLA Hazardous Substances:

CAS Number	Wt%	Component Name
67-56-1	<1%	Methyl Alcohol

Section 312 Hazard Class:

Fire: Yes.

Sudden Release of Pressure: No.

Reactive: No.
Acute Health: Yes.
Chronic Health: Yes.

Section 313 Toxic Chemicals:

CAS Number	Wt%	Component Name
67-56-1	<1%	Methyl Alcohol

1. Product Identifier

Product name: BallistiX's Ranger Vinyl Surface Treatment - PART B

PART B

Details of the Manufacturer/Supplier:

Meghan's Supply & Design 11724 Main Street, Suite 200

Fredericksburg, Virginia 22408 Phone: 540-840-9568 INFOTRAC: 800-535-5053 www.supplyndesign.com

Product Description: BallistiX's Ranger Vinyl Surface Treatment-Interior Single Application for Resilient Vinyl Floors
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.

2. Hazard(s) Identification

HMIS RATING:

Health: 0. Flammability: 0. Reactivity: 0.

Classification of the Substance/Mixture: NON-FLAMMABLE LIQUID.

Signal Word: WARNING!

Hazard Statement: Product is non-hazardous. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

Hazard Pictograms:



Precautionary Statements: Keep out of reach of children. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection equipment as required. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally.

Hazards Not Otherwise Classified: None known.

3. Composition/Information on Ingredients

Substance/Mixture: Proprietary Mixture.

CAS Number	Wt%	Components	Exposure Limits
64-19-7	<5%	Proprietary Acetic Mixture	TWA 10 ppm, (25 mg/m ³) ST 15 ppm





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4. First-Aid Measures

Inhalation: Remove to fresh air.

Skin Contact: No first aid should be needed. Wash with soap and water.

Eye Contact: Immediately flush with water for 15 minutes.

Ingestion: N/A.

5. Fire-Fighting Measures

Flash Point: Not flammable.

Extinguishing Medium: Use medium suitable for the surrounding area.

Unsuitable Extinguishing Medium: None.

Unusual Fire Hazards: None.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment as recommended in Section 8.

Methods and Materials for Containment and Clean Up: Not applicable; product is non-hazardous. Check local regulations for proper disposal of dilute organic acids.

7. Handling and Storage

Precautions for Safe Handling: No special precautions.

Precautions for Safe Storage: Do not freeze.

8. Exposure Controls/Personal Protection

Exposure Limits:

Components Exposure Limits

Proprietary Acetic Mixture TWA 10 ppm, (25 mg/m³) ST 15 ppm

Engineering Controls: Local ventilation recommended.

Individual Protection Measures:

Eye Protection: OSHA approved safety glasses with side shields at a minimum.

Skin Protection: Washing at mealtime and end of shift, no special protection is needed. Rubber or latex gloves are adequate for

preventing skin irritation.

Respiratory Protection: Respiratory protection is not required.

Personal Protective Measures: Eye-wash station (bottle) should be within direct access of work area. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

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9. Physical and Chemical Properties

Physical State: Liquid.
Appearance: Clear.
Odor: Mild odor of vinegar.

pH: 4-6.

Solubility in water: Complete. Boiling Point: Not determined.

Specific Gravity: @ 77°F (25°C): Not determined.

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

10. Stability and Reactivity

Reactivity: NA.

Chemical Stability: Stable.

Other:

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None. Materials to Avoid: None.

11. Toxicological Information

Acute Health Effects:

Inhalation: Vapor may irritate nose and throat.

Ingestion: None.

Skin Contact: Causes skin irritation. **Eye Contact:** Causes eye irritation.

Signs and Symptoms of Exposure:

Burning pain in the nose and throat (inhalation), pain, redness and tearing (eye exposure), itching or burning (skin exposure).

Special Hazards:

Carcinogens: None known. Mutagens: None known. Teratogens: None known.

Reproductive Toxins: None known.

12. Ecological Information

Not Applicable.

13. Disposal Considerations

Disposal Methods: Not applicable; product is non-hazardous. Check local regulations for proper disposal of dilute organic acids.

RCRA Hazard Class (40 CFR 261): N/A (not regulated).

State or local laws may impose additional regulatory requirements regarding disposal.

AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT

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AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION 8.

14. Transport Information

UN Number: N/A (not regulated).

UN Proper Shipping Name: N/A (not regulated). **Transport Hazard Class:** N/A (not regulated).

Packing Group: N/A (not regulated).

Environmental Hazard Name: N/A (not regulated).

DOT Information: (49 CFR 172.101).

15. Regulatory Information

EPA SARA Title III Chemical Listings:

Section 304 CERCLA Extremely Hazardous Substance: None.

Section 304 CERCLA Hazardous Substances: None.

SECTION 312 Hazard Class:

Fire: No.

Sudden Release of Pressure: No.

Reactive: No. Acute Health: No. Chronic Health: No.

Section 313 Toxic Chemicals: None.

1. Product Identifier

Product name: BallistiX's Ranger Vinyl Surface Treatment - PART C

PART C

Details of the Manufacturer/Supplier:

Meghan's Supply & Design 11724 Main Street, Suite 200

Fredericksburg, Virginia 22408 Phone: 540-840-9568 INFOTRAC: 800-535-5053 www.supplyndesign.com

Product Description: BallistiX's Ranger Vinyl Surface Treatment- Interior Single Application for Resilient Vinyl Floors

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.

2. Hazard(s) Identification

HMIS RATING:

Health: 1.

Flammability: 3. Reactivity: 0.

Classification of the Substance/Mixture: FLAMMABLE LIQUID, n.o.s.

Signal Word: WARNING!

Hazard Statement: May cause skin irritation. Harmful if inhaled. May cause respiratory irritation. Will emit vapors of Methanol if seal is broken and mixture is exposed to moisture.

Hazard Pictograms:



Precautionary Statements: Keep out of reach of children. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection equipment as required. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally.

Hazards Not Otherwise Classified: None known.

3. Composition/Information on Ingredients

Substance/Mixture: Proprietary Mixture.

CAS Number	Wt%	Components	Exposure Limits
67-56-1	<33%	Dimethyl Carbinol	TWA 400 ppm, STEL 500 ppm
001569-01-3	<66%	Propylene glycol n-propyl ether	None established; guide TWA 50 ppm
Proprietary Mixture	<5%	Alkoxysilanes	None established; guide TWA 50 ppm

4. First-Aid Measures

Inhalation: Remove to fresh air. Get medical attention if ill effects persist. **Skin Contact:** No first aid should be needed. Wash with soap and water.

Eye Contact: Immediately flush with water for 15 minutes.

Ingestion: Get medical attention. If conscious, induce vomiting. Lie down, keep warm and cover eyes to exclude light.

Comments: Treat same as Methyl Alcohol poisoning.

5. Fire-Fighting Measures

Flash Point: 53.0°F (12.0°C).

Extinguishing Medium: Carbon Dioxide (CO₂), Water Fog, Dry Chemical.

Unsuitable Extinguishing Medium: Water, (closed containers may be cooled).

Fire Hazards: Static electricity may accumulate and ignite vapors. Prevent a possible fire hazard by suitable means, such as bonding and grounding, inert gas purge, vapor dilution and the like. Vapors are heavier than air and can travel along the ground to remote ignition sources.

Unusual Fire Hazards: None.

Fire Fighting Procedures: Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Evacuate the area in cases of overheating or fire.

Flammable Limits in Air: LEL: 2.0% UEL (200°F): 12.7% Volume percent.

Incompatibility: (Materials to avoid): heat, sparks, open flame.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment as recommended in Section 8.

Methods and Materials for Containment and Clean Up: Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent possible spontaneous combustion, store rags, mops, absorbent, etc.; used during clean up in appropriate containers covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as washing with mild, caustic detergents or solutions; or high-pressure steam for large areas. Observe any safety precautions applicable to the cleaning material used.

7. Handling and Storage

Precautions for Safe Handling: No special precautions as long as containers are undamaged. Product evolves flammable Methyl Alcohol when exposed to moisture or humid air. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally. No eating, drinking, smoking, or hot work in area.

Precautions for Safe Storage: Keep container closed and stored away from heat, sparks and open flame. Keep container closed and stored away from moisture or water.

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8. Exposure Controls/Personal Protection

Exposure Limits:

ComponentsExposure LimitsDimethyl CarbinolTWA 400 ppm, STEL 500 ppmPropylene glycol n-propyl etherNone established; guide TWA 50 ppmAlkoxysilanesNone established; quide TWA 50 ppm

Engineering Controls: Local ventilation recommended.

Individual Protection Measures:

Eye Protection: OSHA approved safety glasses with side shields at a minimum.

Skin Protection: Washing at mealtime and end of shift, no special protection is needed. Rubber or latex gloves are adequate for

preventing skin irritation.

Respiratory Protection: Respiratory protection is not required provided adequate local exhaust ventilation is provided per recommended exposure guidelines. Avoid enclosed spaces for mixing or applying. When needed, use respiratory protection NIOSH ½ face, black cartridge, at a minimum.

Personal Protective Measures: Eye-wash station (bottle) should be within direct access of work area. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

9. Physical and Chemical Properties

Physical State: Liquid. Appearance: Clear.

Odor: Strong Odor (rubbing alcohol). pH: Not Applicable (non-aqueous). Solubility in Water: Complete.

Boiling Point: Miscible blend, approximately 1810°F (830°C).

Specific Gravity: @ 77°F (25°C): 0.85.

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

10. Stability and Reactivity

Reactivity: NA.

Chemical Stability: Stable.

Other:

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None.

Materials to Avoid: Oxidizing material can cause a reaction; acetaldehyde, chlorine, ethylene oxide, acids, isocyanates.

11. Toxicological Information

Acute Health Effects:

Inhalation: Vapor may irritate nose and throat. Overexposure may cause drowsiness.

Ingestion: Product contains small amounts of Methyl Alcohol which may cause nausea, vomiting, abdominal pain, flushing of the face,

hypotension, weakness and loss of consciousness if large amount of product is swallowed.

Skin Contact: Causes skin irritation. **Eye Contact:** Causes eye irritation.

Prolonged/Repeated Exposure Effects:

Inhalation: Product generates Methyl Alcohol when exposed to moisture, which may cause blindness and damage to nervous system.

Ingestion: Product generates Methyl Alcohol, which may cause blindness and possibly death, if swallowed.

Skin Contact: May cause irritation, dermatitis. Eye Contact: May cause irritation; blindness.

Signs and Symptoms of Exposure:

Burning pain in the nose and throat (inhalation), pain, redness and tearing (eye exposure), itching or burning (skin exposure).

Special Hazards:

Carcinogens: None known. Mutagens: None known. Teratogens: None known.

Reproductive Toxins: None known.

Sensitizers: None known.

12. Ecological Information

Not Applicable.

13. Disposal Considerations

Disposal Methods: Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent possible spontaneous combustion, store rags, mops, absorbent, etc.; used during clean up in appropriate containers covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as washing with mild, caustic detergents or solutions, or high-pressure steam for large areas. Observe any safety precautions applicable to the cleaning material used.

RCRA Hazard Class (40 CFR 261):

When a decision is made to discard this material, as received, is it classified as a hazardous waste? Yes.

Characteristic Waste:

Ignitable: D001.

Observe all State or Local Laws pertaining to this class. Local laws may impose additional requirements.

Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned Packaging:

Recommendation: Disposal must be made according to official regulations.

AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION 8.

14. Transport Information

UN Number: UN 1993.

UN Proper Shipping Name: Methoxy-Silane/Alcohol.

Transport Hazard Class: 3.

Packing Group: II.

Environmental Hazard Name: FLAMMABLE LIQUID, n.o.s.

DOT Information: (49 CFR 172.101).

15. Regulatory Information

EPA SARA Title III Chemical Listings:

Section 304 CERCLA Extremely Hazardous Substance: None

Section 304 CERCLA Hazardous Substances:

CAS Number	Wt%	Component Name	
67-56-1	2%	Methyl Alcohol	5000.00 lb. rq.

Section 312 Hazard Class:

Fire: Yes.

Sudden Release of Pressure: No.

Reactive: No.
Acute Health: Yes.
Chronic Health: Yes.

Section 313 Toxic Chemicals:

CAS Number	Wt%	Component Name
67-56-1	2%	Methyl Alcohol

1. Product Identifier

Product name: BallistiX's Ranger Vinyl Surface Treatment - PART D

PART D

Details of the Manufacturer/Supplier:

Meghan's Supply & Design 11724 Main Street, Suite 200

Fredericksburg, Virginia 22408 Phone: 540-840-9568 INFOTRAC: 800-535-5053 www.supplyndesign.com

Product Description: BallistiX's Ranger Vinyl Surface Treatment- Interior Single Application for Resilient Vinyl Floors

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.

2. Hazard(s) Identification

HMIS RATING:

Health: 1.

Flammability: 3. Reactivity: 0.

Classification of the Substance/Mixture: FLAMMABLE LIQUID, n.o.s.

Signal Word: WARNING!

Hazard Statement: May cause skin irritation. Harmful if inhaled. May cause respiratory irritation. Will emit vapors of Methanol if seal is broken and mixture is exposed to moisture.

Hazard Pictograms:



Precautionary Statements: Keep out of reach of children. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection equipment as required. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally.

Hazards Not Otherwise Classified: None known.

3. Composition/Information on Ingredients

Substance/Mixture: Proprietary Mixture.

CAS Number	Wt%	Components	Exposure Limits
67-63-0	>50%	Isopropyl Alcohol	TWA 400 ppm, STEL 500 ppm
001569-01-3	<50%	Propylene glycol n-propyl ether	None established; guide TWA 50 ppm

SAFETY DATA SHEET

4. First-Aid Measures

Inhalation: Remove to fresh air. Get medical attention if ill effects persist. **Skin Contact:** No first aid should be needed. Wash with soap and water.

Eye Contact: Immediately flush with water for 15 minutes.

Ingestion: Get medical attention. If conscious, induce vomiting. Lie down, keep warm and cover eyes to exclude light.

Comments: Treat same as Methyl Alcohol poisoning.

5. Fire-Fighting Measures

Flash Point: 53.0°F (12.0°C).

Extinguishing Medium: Carbon Dioxide (CO₂), Water Fog, Dry Chemical.

Unsuitable Extinguishing Medium: Water, (closed containers may be cooled).

Fire Hazards: Static electricity may accumulate and ignite vapors. Prevent a possible fire hazard by suitable means, such as bonding and grounding, inert gas purge, vapor dilution and the like. Vapors are heavier than air and can travel along the ground to remote ignition sources.

Unusual Fire Hazards: None.

Fire Fighting Procedures: Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Evacuate the area in cases of overheating or fire.

Flammable Limits in Air: LEL: 2.0% UEL (200°F): 12.7% Volume percent.

Incompatibility: (Materials to avoid): heat, sparks, open flame.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment as recommended in Section 8.

Methods and Materials for Containment and Clean Up: Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent possible spontaneous combustion, store rags, mops, absorbent, etc.; used during clean up in appropriate containers covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as washing with mild, caustic detergents or solutions; or high-pressure steam for large areas. Observe any safety precautions applicable to the cleaning material used.

7. Handling and Storage

Precautions for Safe Handling: No special precautions as long as containers are undamaged. Product evolves flammable Methyl Alcohol when exposed to moisture or humid air. Use with adequate ventilation. Avoid eye contact. Avoid breathing vapors. Do not take internally. No eating, drinking, smoking, or hot work in area.

Precautions for Safe Storage: Keep container closed and stored away from heat, sparks and open flame. Keep container closed and stored away from moisture or water.

SAFETY DATA SHEET

8. Exposure Controls/Personal Protection

Exposure Limits:

 Components
 Exposure Limits

 Isopropyl Alcohol
 TWA 400 ppm, STEL 500 ppm

 Propylene glycol n-propyl ether
 None established; guide TWA 50 ppm

Engineering Controls: Local ventilation recommended.

Individual Protection Measures:

Eye Protection: OSHA approved safety glasses with side shields at a minimum.

Skin Protection: Washing at mealtime and end of shift, no special protection is needed. Rubber or latex gloves are adequate for

preventing skin irritation.

Respiratory Protection: Respiratory protection is not required provided adequate local exhaust ventilation is provided per recommended exposure guidelines. Avoid enclosed spaces for mixing or applying. When needed, use respiratory protection NIOSH ½ face, black cartridge, at a minimum.

Personal Protective Measures: Eye-wash station (bottle) should be within direct access of work area. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

9. Physical and Chemical Properties

Physical State: Liquid. Appearance: Clear.

Odor: Strong Odor (rubbing alcohol). pH: Not Applicable (non-aqueous). Solubility in Water: Complete.

Boiling Point: Miscible blend, approximately 1810°F (830°C).

Specific Gravity: @ 77°F (25°C): 0.85.

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

10. Stability and Reactivity

Reactivity: NA.

Chemical Stability: Stable.

Other:

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None.

Materials to Avoid: Oxidizing material can cause a reaction; acetaldehyde, chlorine, ethylene oxide, acids, isocyanates.

11. Toxicological Information

Acute Health Effects:

Inhalation: Vapor may irritate nose and throat. Overexposure may cause drowsiness.

Ingestion: Product contains small amounts of Methyl Alcohol which may cause nausea, vomiting, abdominal pain, flushing of the face,

hypotension, weakness and loss of consciousness if large amount of product is swallowed.

Skin Contact: Causes skin irritation. **Eye Contact:** Causes eye irritation.

Prolonged/Repeated Exposure Effects:

Inhalation: Product generates Methyl Alcohol when exposed to moisture, which may cause blindness and damage to nervous system.

Ingestion: Product generates Methyl Alcohol, which may cause blindness and possibly death, if swallowed.

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Special Hazards:

Carcinogens: None known. Mutagens: None known. Teratogens: None known.

Reproductive Toxins: None known.

Sensitizers: None known.

12. Ecological Information

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13. Disposal Considerations

Disposal Methods: Disposal of collected product, residues and clean up materials may be governmentally regulated. Observe all applicable local, state and federal waste management regulations. Remove possible ignition sources and if needed, use non-sparking tools and equipment. To prevent possible spontaneous combustion, store rags, mops, absorbent, etc.; used during clean up in appropriate containers covered with water. Mop, wipe or soak up with absorbent material and contain for salvage or disposal. For large spills, provide diking or other appropriate containment to keep material from spreading. Clean any remaining slippery surfaces by appropriate techniques, such as washing with mild, caustic detergents or solutions, or high-pressure steam for large areas. Observe any safety precautions applicable to the cleaning material used.

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Ignitable: D001.

Observe all State or Local Laws pertaining to this class. Local laws may impose additional requirements.

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Uncleaned Packaging:

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Chronic Health: Yes.

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