SEALMARK RESTORATION COATING TECH DATA SHEET

DESCRIPTION

The **Sealmark Restoration Coating** is an advanced formulation designed for superior protection and durability. This innovative coating combines water-based acrylic resins, select fillers, thermal sphere particles, and a proprietary blend of algaecides and biocides. The incorporation of fine micro-sized particles ensures a low sheen, smooth finish, creating a robust and flexible coating film.

Key Features:

- **High Solids Content**: With a solids content of 60% ± 2% by volume, Sealmark #2003 offers a heavy-bodied, flexible coating that adheres seamlessly to various substrates.
- **Versatile Application**: Available in a wide range of colors, this coating is engineered to withstand all weather conditions, providing long-lasting protection.
- **Advanced Protection**: The unique mixture of algaecides and biocides helps prevent the growth of algae and other microorganisms, ensuring the longevity of the coating.
- **Warranty**: Sealmark offers a 20-year limited material warranty for this product at no additional cost, guaranteeing its performance and durability.

USES

The **Sealmark Restoration Coating** is engineered for application on a wide range of exterior substrates, delivering unparalleled protection against severe weather conditions.

- **Versatile Application:** This flexible, hydrophobic coating is suitable for wood, metal, aluminum, EIFS (existing or new), stucco, masonry, cured concrete, cement board, aged vinyl siding, and previously painted stable substrates.
- **Crack Bridging and Waterproofing: Sealmark Restoration Coating** effectively fills, bridges, and conceals hairline cracks, providing waterproofing for stucco and masonry substrates when applied according to specifications.
- **Durability:** The unique formulation ensures a tenacious bond to all properly prepared surfaces, offering exceptional resistance to UV degradation, chipping, peeling, and surface delamination

FEATURES & BENEFITS

- **Reduces Utility Costs**: Proven to reduce heating and cooling energy loss, while eliminating costly future repairs caused by moisture and heat damage.
- **High Solar Reflectance**: Achieves 95% solar reflectance, significantly reducing heat absorption.
- **Waterproof Thermal Barrier**: Provides a waterproof thermal barrier to treated surfaces, enhancing energy efficiency.
- **Durability and Flexibility**: Superior properties allow the coating to maintain its surface integrity, managing the stress of subtle building movements and temperature changes. It expands and remains bonded to the substrate.
- **Non-Toxic and Environmentally Safe**: VOC compliant, meeting all government standards with zero VOC content. Environmentally safe in both suspension and cured states, water-soluble before curing, and will not support combustion (ASTM-E-108), Class A Fire Rating.
- **Mold and Mildew Resistance**: Resistant to mold and mildew, ensuring long-lasting protection.
- **Crack Resistance**: Resists cracks, maintaining a smooth and uniform appearance.
- **UV Protection**: Encapsulated Thermosphere Coating is less prone to fading and protects exterior walls against UV rays and environmental exposure, guarding against surface breaks, chipping, and flakes.
- **Versatile Use**: Suitable for commercial, industrial, and residential applications.
- **Color Matching**: Over 900 color matches are available through a verification system to ensure corporate-approved color schemes.
- **Warranty**: Offers a 20-year limited material warranty, providing peace of mind and assurance of quality

TECHNICAL SPECIFICATIONS

- **Solids Content:** 60% ± 2% by volume
- **Viscosity:** 86-60 KU (Krebs Units)
- **Dry Time:** Touch dry in 2 hours, recoat in 4-6 hours
- **VOC Content:** <50 g/L, compliant with environmental regulations. Tested for VOC levels using ASTM D-3960, D-3792, D-2369, and D-1475 methods, with zero VOC detected
- **Elongation:** 400% at break, ensuring flexibility
- **Tensile Strength:** 300 psi, providing robust performance
- **Adhesion:** Exhibits excellent adhesion to various substrates, as demonstrated by the ASTM-D-3359 Tape Cross-Hatch Methos. The coating remained fully intact, with 100% adhesion, and exceeded 200 psi on concrete
- **Weather Resistance:** Proven resistance to UV, moisture, and temperature extremes
- **Chemical Resistance:** Resistant to mild acids, alkalis, and salts
- **Coverage Rate**: 265 sq ft per gallon per coat, yielding approximately 6 mil wet film thickness (minimum 6 mil per coat required)
- **Application Requirements**: Two coats at the specified coverage rate in conjunction with Sealmark #2000 Primer for optimal performance
- **Surface Considerations**: Coverage rates may decrease when applying to unsealed, unprimed, rough, or porous substrates

ENVIRONMENTAL IMPACT

- Zero to low VOC Formulation: **Sealmark Restoration Coating** contains less than 50 g/L of VOCs, minimizing its impact on indoor and outdoor air quality.
- Eco-Friendly Ingredients: The coating incorporates eco-friendly ingredients, reducing reliance on non-renewable resources and lowering its carbon footprint.
- Durability and Longevity: Enhanced durability reduces the need for frequent recoating, thereby decreasing waste generation and the environmental impact associated with disposal or recycling.
- Energy Efficiency: The thermal sphere particles contribute to improved energy efficiency by reducing heat transfer, which can help lower energy consumption for cooling or heating.

COMPOSITION

The **Sealmark Restoration Coating** features a specially formulated, fortified acrylic compound designed to provide superior performance and durability. This advanced compound includes the following technical attributes:

- **High-Quality Acrylic Resins**: Utilizes premium acrylic resins to ensure excellent adhesion, flexibility, and long-lasting protection.
- **Enhanced Durability**: Fortified with select fillers and thermal sphere particles to withstand harsh weather conditions and resist UV degradation, chipping, peeling, and surface delamination.
- **Superior Bonding**: The compound forms a tenacious bond with a variety of substrates, including wood, metal, aluminum, EIFS, stucco, masonry, cured concrete, cement board, and aged vinyl siding.
- **Thermal Barrier**: Incorporates thermal sphere particles to create a waterproof thermal barrier, reducing heat transfer and improving energy efficiency.
- **Environmental Safety**: Non-toxic and environmentally safe, with zero VOC content, meeting all government standards. The compound is water-soluble before curing and will not support combustion (ASTM-E-108), achieving a Class A Fire Rating.
- **Mold and Mildew Resistance**: Contains a unique blend of algaecides and biocides to prevent the growth of mold and mildew, ensuring the longevity of the coating.
- **Crack Bridging**: Capable of filling, bridging, and concealing hairline cracks, maintaining a smooth and uniform appearance.

PACKAGING INFORMATION

Sealmark Restoration Coating is available in 5 gal(19 L) pails.

WATER VAPOR TRANSMISSION

ASTM E-96 average perm rating less than 4

WARRANTY

Sealmark Restoration Coating is subject to a written limited warranty upon request to Sealmark.

COVERAGE

- Coverage Rate: The recommended coverage rate for **Sealmark Restoration Coating** is 265 sq ft per gallon per coat, yielding approximately 6 mil wet film thickness (minimum 6 mil per coat required).
- Application Requirements: For optimal performance, apply two coats at the specified coverage rate in conjunction with Sealmark #2000 Primer. This ensures maximum longevity, waterproofing properties, and crack bridging, qualifying the product for the warranty.
- Surface Considerations: Coverage rates may decrease when applying to unsealed, unprimed, rough, or porous substrates. *Note: Coverage rates are dependent on surface conditions and application techniques. The rates provided are estimates only.*

WET MIL SQ FT COVERAGE RATES

One gallon volume will spread and cover approximately 1,600 sq ft of smooth surface area 1 mil thick.
To calculate the dry mil thickness of the coating you must know the coatings volume solids.

One mil is equal to 1/1000 of an inch

One (1) gallon volume will cover the following sq ft area at the wet mil thickness.

1 mil	1600	sq ft	35 mil	45.7	sq ft
2 mil	800	sq ft	40 mil	40	sq ft
3 mil	533.3	sq ft	45 mil	35.5	sq ft
4 mil	400	sq ft	50 mil	32	sq ft
5 mil	320	sq ft	55 mil	29	sq ft
6 mil	266.6	sq ft	60 mil	24.6	sq ft
7 mil	228.5	sq ft	70 mil	22.8	sq ft
8 mil	200	sq ft	75 mil	21.3	sq ft
9 mil	177.8	sq ft	80 mil	20	sq ft
10 mil	160	sq ft	85 mil	18.8	sq ft
12 mil	133	sq ft	90 mil	17.7	sq ft
15 mil	106.6	sq ft	95 mil	16.8	sq ft
16 mil	100	sq ft	100 mil	16	sq ft
17 mil	94	sq ft	125 mil	12.8	sq ft
18 mil	88.8	sq ft	150 mil	10.6	sq ft
20 mil	80	sq ft	200 mil	9	sq ft
25 mil	64	sq ft	250 mil	6.4	sq ft
30 mil	53.3	sq ft	500 mil	3.2	sq ft

APPLICATIONS

Sealmark Restoration Coating can be applied to any surface including existing stucco, glazed brick, rubber, cured concrete, wood, metals, and other structurally stable or painted substrates.

Application Note: For optimal results on previously unpainted surfaces, a primer base coat of Sealmark #2000 is required, followed by two coats of **Sealmark Restoration Coating** to meet the warranty requirement

Drying Time

Sealmark Restoration Coating's drying time is influenced by ambient temperature and humidity levels. Assess environmental conditions prior to applying coating to ensure optimal drying performance.

- **Ambient Conditions:** The drying time of **Sealmark Restoration Coating** depends on ambient air temperature and relative humidity (RH).
- **Normal Conditions:** Under normal conditions (70°F and 55% RH), a minimum of 6 hours is required for acceptable curing before applying a second coat.
- **Complete Cure:** The coating reaches complete cure after 24 hours.
- **Extended Drying Time:** High relative humidity, damp conditions, and cool temperatures will extend the drying time.

LIMITATIONS

Sealmark Restoration Coating must not be applied to substrates treated with silicon-based water repellents or to any adjacent surfaces that are not properly sealed or waterproofed.

USABLE LIFE AND STORAGE

Coating must be stored at a continuous environmental temperature of at least 45°F or higher. Storing in temperatures closer to normal room temperature 70°F will result in easier application. ALWAYS AVOID FREEZING. Always store in tightly sealed container and away from direct sunlight. The shelf life is for a period of 1 year after the product's manufactured date.

HEALTH, SAFETY AND ENVIRONMENTAL INFORMATION

Please see our website for further information or consult your local Sealmark representative.

PROCEDURES

Job Conditions

Temporary protection shall always be provided for a specified duration until the **Sealmark Restoration Coating** has achieved a completely cured state to protect from all weather, natural elements, and other potential damage.

Surface Preparation Procedures

1. **Surface Condition:** Ensure the surface is clean, dry, and structurally stable. The surface temperature should be above 45°F.
2. **Contaminant Removal:** The surface must be free from grease, oils, solvents, and silicone-based products that could compromise bond integrity.
3. **Substrate Aging:** For concrete, brick, or masonry walls, allow the substrates to age for a minimum of 30 days. The surface pH must not exceed 9.
    - PH Adjustment: To lower the pH, wash the substrate with a mild solution of citric acid and clean water. Rinse thoroughly with clean water and allow the surface to dry completely before proceeding with the coating application.
4. **Crack Filling:**
    - Small Cracks: Use KOMMAND SEAL Caulk Sealant to fill small surface cracks, leveling it with the surrounding surface.
    - Larger Cracks: For cracks 1/8” or larger, use KOMMAND SEAL Caulk Sealnt to fill and level the crack with the surface. Allow the crack repair products to dry completely before applying the coating. If additonal reinforcement is needed, embed Sealmark Fabric into one coat of Restoration Coating and then apply two layers of top coat.
5. **Priming:** Unpainted substrates must be primed with Sealmark #2000 Primer to ensure proper adhesion and performance.
6. **Material Compatibility:** Note that Sealmark coatings cannot be applied to asphalt or certain plastic materials.

Mixing Procedures

To ensure optimal performance and consistency of the **Sealmark Restoration Coating**, follow these detailed mixing procedures:

1. **Preparation**:
    - Ensure the pail of **Sealmark Restoration Coating** is at room temperature (above 45°F) before mixing.
    - Gather necessary equipment: a low RPM drill (300-450 RPM) and a standard paint mixing bit.
2. **Mixing**:
    - **Step 1**: Open the pail and inspect the contents for any separation or settling.
    - **Step 2**: Insert the paint mixing bit into the low RPM drill.
    - **Step 3**: Submerge the mixing bit into the coating, ensuring it reaches the bottom of the pail.
    - **Step 4**: Start the drill at a low speed to avoid splashing and mix gently for 60 seconds. Move the mixing bit in a circular motion and up and down to ensure thorough blending of all components.
    - **Step 5**: After 60 seconds, stop the drill and lift the mixing bit out of the pail slowly to allow excess coating to drip back into the pail.
3. **Inspection**:
    - Check the consistency of the coating. It should be uniform and free of lumps or unmixed material.
    - If necessary, repeat the mixing process for an additional 30 seconds to achieve the desired consistency.
4. **Application Readiness**:
    - Once mixed, the **Sealmark Restoration Coating** is ready for application. Use immediately to ensure the best results.

Safety Note: Always wear appropriate personal protective equipment (PPE) such as gloves, goggles, and a dust mask during the mixing process to protect against splashes and fumes. Following these procedures will help ensure the **Sealmark Restoration Coating** is properly mixed and ready for application, providing optimal performance and durability.

Application Procedures

No special tools are required for the correct application of **Sealmark Restoration Coating**. However, using the appropriate tools and techniques will ensure optimal results:

1. **Tools Required**:
   - **Heavy-Duty Paint Roller/Applicator**: Ideal for large, flat surfaces. Use a roller with a high-quality, lint-free cover to apply the coating uniformly.
   - **High-Quality Brush**: Suitable for detailed work and edges. Ensure the brush is clean and free of loose bristles.
   - **Airless Sprayer**: For large or complex surfaces, an airless sprayer can be used. The sprayer should operate at 1,500 psi with a minimum tip size of 0.019 inches (19/1000th).
2. **Application Technique**:
   - **Roller Application**: Load the roller evenly with **Sealmark Restoration Coating**. Apply the coating in a consistent, uniform manner to completely cover the prepared substrate. Avoid overloading the roller to prevent drips and uneven coverage.
   - **Brush Application**: Dip the brush into the coating and apply with smooth, even strokes. This method is best for corners, edges, and detailed areas where a roller cannot reach.
   - **Sprayer Application**: Set the airless sprayer to 1,500 psi and use a tip size of 0.019 inches. Apply the coating in a steady, overlapping pattern to ensure even coverage. Maintain a consistent distance from the surface to avoid runs and sags.
3. **Important Considerations**:
   - **Do Not Back-Roll or Brush Over Applied Areas when product is tacking up**: Once **Sealmark Restoration Coating** has been applied, do not back-roll or brush over the area until it is completely dry. Back-rolling or brushing can disrupt the uniformity and coverage of the coating, leading to an uneven finish.
   - **Drying Time**: Allow the coating to dry before applying additional coats or exposing the surface to weather conditions.
4. **Safety Precautions**:
   - Wear appropriate personal protective equipment (PPE) such as gloves, goggles, and a dust mask during application.
   - Ensure adequate ventilation in the work area to minimize inhalation of fumes.

Following these procedures will help achieve a smooth, durable, and aesthetically pleasing finish with **Sealmark Restoration Coating**. If you have any further questions or need additional guidance, contact your local representative.

Cleaning Procedures

Use soap and water for clean-up. System materials are water-borne and are non-toxic. Prior to curing, system materials are water soluble. Clean up any spills, overspray, or residue of the system materials before they have time to set. Cured or dried system materials are not water soluble and may prove to be difficult to impossible to remove without damage to substrate or other materials upon which they have dried. Dispose of waste materials and empty containers into an approved waste disposal facility. Never dump materials into storm drainages, sanitary sewers, or into bodies of water.

CAUTIONS

To ensure easy clean-up of **Sealmark Restoration Coating**, take appropriate steps such as properly tarping/ securing the application area to prevent unintended application, as the product may be difficult to remove.

NOTE: Certain wall substrates may have been coated with a clear silicon water repellent, which can adversely affect the adhesion of Sealmark products. If the presence of silicon treatment is unknown, it is recommended to apply a test application to the substrate and check adhesion after curing.

TEST RESULTS & APPROVALS

TEST	PROPERTY	RESULT
ASTM-D-3359	Adhesion	Tape cross-hatch method. 100% of coating remained in place.
ASTM-D-2794	Impact Resistance	Withstood 160-inch pounds
ASTM-D-714	Blistering Resistance	No blisters
ASTM-D-1308	Chemical Resistance	24-hour exposure to 22 chemical staining agents
ASTM-D-2369	Amount of Solids	Percentage wt/wt 67.77 Percentage wt/vol 85.41
ASTM-D-412	Elongation	400%
ASTM-D-3273-73T Tropical Chamber Exposure	Fungal Resistance	No fungal growth on sample
ASTM-D-2247	Water Resistance	398 hours-No cracking, peeling, blistering or color change
ASTM-D-968	Abrasion Resistance	Withstood 450 L. of falling sand abrasion. No wear through.
ASTM-B-117	Corrosion Resistance	300 hours of salt fog. No rust
ASTM-C-1549	Solar Reflectance	94.7%
ASTM-C-1371	Thermal Emittance	.82
ASTM-E42-52	Accelerated Weather Test	Exceeds max testing requirements
ASTM-E-96	Water Vapor Transmission (breathing ability)	Permeance 1.365 perm Rough 1.365 Smooth 1.57
ASTM-E-108-82	Fire Resistance	Class A Rating
ASTM-E84-91A	Surface Burning Characteristics	Flame Spread Index 15 Smoke Development 55
ASTM-514	Wind Driven Rain	No leakage observed
ICBO STD	Bonding Strength Test	After weathering- Freeze/thaw Passes, no failures
ICBO Spec	Freeze/Thaw Cycle	10 Cycles, passing each cycle 100 F 8 hours -20 F 16 hours
Lab Methods	Solar Testing	Sealmark outperformed asphalt, aluminum, and elastomeric coatings
2-inch steel ball dropped repeatedly	Hail Resistance	Passes, No fractures of surface
Field Test	Ponding	After 4 weeks, no water penetrated through the coating system.
ASTM-D-1970 Capability to Seal Around Nail (Head of Water Test), Section 7.9	Nail Sealability	No water in the bottom container. on the shank of the fasteners, and on underside of substrate