SHINGLE SHIELD MAX™: HI-PERFORMANCE PROFESSIONAL ROOF COATING

TECHNICAL DATA SHEET (TDS)

Description

Vital Coat Shingle Shield MAX™ Roof Sealer is a high-performance, professional grade roof coating formulated to protect asphalt shingles from environmental degradation. This proprietary sealer penetrates the shingle surface to form a flexible, hydrophobic barrier that resists moisture infiltration, ultraviolet radiation, thermal cycling, and microbial growth.

Function & Performance Characteristics

- **Application**: Designed for direct application to asphalt shingle substrates.
- **Film Properties**: Upon curing, forms a clear, breathable film that enhances water resistance while maintaining substrate integrity.
- **Durability**: Significantly reduces surface erosion of granule layers, helps minimize premature aging, and provides added resistance to hail impact.
- **Cleanability**: Cured surface is compatible with mild detergents and can be easily maintained without compromising the coating.
- **Finish**: Imparts a low-gloss sheen for improved visual uniformity without altering the underlying color profile.
- **Self-Healing Polymer**: If coating is stressed and blistered, it will self-restore to maintain a protective barrier.

Environmental Profile

- Water-based, non-toxic formulation
- Low VOC content
- Non-flammable and safe for residential use

Recommended Use

Ideal for residential and commercial roofing systems utilizing asphalt shingles. Suitable for preventive maintenance and restoration applications.

Primary Applications

Vital Coat's Shingle Shield MAX™ Roof Sealer is an excellent roof replacement alternative especially for excessive deterioration or end of life shingles. Shingle Shield MAX™ Roof Sealer will work on many types of roofs:

- Asphalt Shingles
- Clay Shingles
- Concrete
- Slate Shingles

VITAL COAT
PREMIUM SEALERS AND COATINGS

SHINGLE SHIELD MAX™ ROOF SEALER

Features/Benefits

- Aides in extending the life of existing shingles.
- Reduces granular loss
- Provides an added water-resistant protective layer
- Mold and Mildew Resistant
- Long Lasting
- VOC compliant in all 50 States and Canada
- UV stable, non-yellowing
- Clear matt finish
- Protects against hail damage

Technical Information

Property	Result
Mix Ratio, By Volume	No Mixing Required.
Volume Solids % By Weight	Mixed: 25%
Density (KG/L)	Mixed: 1.06
VOC Content	<25 g/L
Flash Point	Same as Water
Freezing Point	Liquid/ 32°F (0°C) – Keep from Freezing
Dilution	Do not dilute

System Properties

Property	Result
Flexibility 1/8" Mandrel - ASTM D1737	Pass
Viscosity @ 77°F (25°C)	Mix: 500 cps
pH	4.5-5.5
Appearance	White Solution – Dries Clear
Transition Temperature	45°F (7°C)
Water/Alkali/Chemical Resistance	Yes

Packaging

This product is available in 5 or 250 US Gal. containers

Storage/Shelf Life

Store in a cool, dry, well-ventilated area. Keep containers tightly closed and store away from heat, sparks, open flame or oxidizing materials. Extended storage at excessive temperatures may produce component separation and odorous fumes from product decomposition.

This product has a shelf life of up to one year in its original, sealed, unopened container. If product appears to be hardened or separated contact Vital Coat before use. Keep from extreme cold, heat or moisture. Keep out of direct sunlight. Keep out of reach from children.

Storage Temperature Min/Max 40°- 95°F

Directions for Use

Surface Preparation:

General: Surfaces must be dry, structurally sound, free of loose or deteriorated shingles, and all other contaminants and can readily accept water. Repair roof leaks prior to application of Shingle Shield MAX™ Roof Sealer. It is not a repair product for active water leaks. Follow local codes and standard best practices during application. Always verify that the application of this product does not void your current roofing warranty. Provide and use safety and fall protection when elevated or on the roof. Do not apply when rain is forecasted within 24 hours.

Initial Roof Assessment: It is recommended to perform a roof assessment prior to application to determine the condition of the roof and evaluate the efficacy of the use of Shingle Shield MAX™ Roof Sealer. Verify that the application of Shingle Shield (RTU) Roof Sealer will not negatively impact the manufactures warranty.

Preparation: – Surface preparation before applying a sealer to the roof is extremely important. Ensure that the roof is free of active organic growth and or stains from mold or mildew on the shingles. The roof should be structurally sound and free of loose or deteriorated shingles. All damaged areas should be repaired prior to application. Repair or fill leaking areas with appropriate roof caulk or sealant. The roof should be cleaned by a professional roof cleaning contractor to prevent further deterioration of the roof. Shingles must be dry at time of application. Damp substrates could cause haziness or loss of adhesion. Ensure that there is no other water repellant treatment on the roof to provide best adhesion of the product. Always test the product on the surface to be treated in an inconspicuous area to ensure proper adherence and satisfactory appearance.

Optimal Conditions at Application	
Ambient Temperature	Above 50°F & Below 85°F*
Surface Temperature	82°-95°F*
Liquid Temperature	45°-95°F*

Note The indicated application temperature is optimum. Shingle Shield MAX™ Roof Sealer can be installed at temperatures lower and higher temperatures. Cure time are impacted by temperature. Cure times are reduced with heat and increased with cooler temperatures. It is not recommended to apply in temperatures lower than 45°F and higher than 95°F.*

SHINGLE SHIELD MAX™ ROOF SEALER

Preparing Shingle Shield MAX™ Roof Sealer for Use:

Stir contents of container to insure proper mixing prior to use.

Application:

Using the right tools is critical to achieving the best coverage rate and sealer thickness for optimal performance. The most common method of applying the sealer is using a pump-up sprayer and roller for back rolling when necessary.

Below is recommended application techniques to achieve best results.

1. Begin the application from the low side of the roof and work your way up. This helps eliminate any streaking from excess runoff if it occurs.
2. Ensure that the pump-up sprayer maintains proper pressure to produce a consistent, even amount of product on to the shingles. Avoid using sprayers that drip or cause splatter.
3. Maintain tip about 8 to 10 inches from the surface being treated (more or less depending on the type of sprayer) and apply with steady, even strokes in a manageable area.
4. Continue this up until you reach a good break point and then begin again at the low side working each section up against the previous wet area. Continue this until entire roof is covered.
5. Allow to dry, (minimum 30 min.) and apply second coat thin coat in a perpendicular or diagonal pattern to the first coat. This will ensure the coverage in areas that may be missed or may be too thin. Always strive to achieve the recommended maximum coverage.

CAUTION: Always ensure that you are using the proper gear and fall protection when on your roof. Consult with a professional installer if needed.

Coverage/Thickness	
Coverage (First Coat)	200-250 ft²/gal
Coverage (Second Coat)	300-450 ft²/gal

Note The indicated coverage is calculated for flat surfaces. A porous surface will require more material in order to cover the same area. Coverage on shingles varies with amount of deterioration of the substrate.*

Curing:

Do not touch treated surface during curing. Do not add water or allow water to come in contact while curing. Protect surface from debris coming in contact with surface while drying.

Drying/Cure Times	
Pot Life	6 Months after opening @77° (25 C°)
Tack Free Time @77°F 50% RH	.5 – 1 Hour
Min/Max Recoat Time @77°F 50% RH	.5 - 2 Hours
Dry to Touch	.5 Hours
Water Resistant	24 Hours
Full Cure	72 hours

Note Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.*

Clean-up

Clean all application equipment with a specified cleaner. Once the material hardens, it can only be removed mechanically. If the product splatters, wash thoroughly with hot soapy water.

Roof Care/Maintenance

Follow the below guidelines to maintain your Shingle Shield MAX™ Roof Sealer protected roof:

1. Perform routine inspections. - Inspections should be made at least twice a year. Once in the spring and once in the fall. Spring inspections help identify any winter damage from ice or snow. Fall inspections identify any repairs needed for the upcoming winter. Always inspect your roof after major storms that could affect the roofing system.
2. Keep your roof clean of debris –Debris on the roof will hold water and cause the shingle and sealer to deteriorate. Keep the valleys free of debris and keep your gutter and downspouts clear to ensure proper drainage.
3. Keep surrounding tree branches pruned to prevent hanging over the roof. – Tree limbs or branches touching the roof will scrub and cause damage to the sealer and the roof. This also helps prevent varmints such as squirrels from climbing on the roof.
4. Secure loose shingle tabs. –Whenever you have a loose shingle, it can be fixed by either replacing the shingle or using a little roof cement to secure it back into place. Regularly inspect any caulking and flashing to prevent leaking.
5. Maintain your roof. – Keeping you roof clean is important. It is recommended to use a professional licensed soft wash company to clean your roof. Do not allow unqualified personnel to maintain your roof. Clean your roof annually or more frequent if needed depending on your conditions. Do not use high water pressure devises or harsh chemicals to clean your roof. Water and laundry grade detergents are all that is necessary to maintain your roof.

Precautions/Limitations

- Before handling, consult the Safety Data Sheet and Container Labels for physical and health hazard information.
- Maximum relative humidity during application and curing: 85%
- Substrate temperature must be 5.5 degrees F above dew point measured
- Humidity content of substrate must be <4% when coating is applied
- Do not apply on porous surfaces where a transfer of humidity may occur during application
- Protect from humidity, condensation and contact with water during the 24-hour initial curing period.
- Use caution when walking on a roof after sealer application. It can be slippery especially when wet. Always wear safety and fall protective gear when on the roof or elevated surface.

Health and Safety

Always wear proper safety equipment to protect eyes and skin. Keep a neat, clean mixing area to avoid potential safety issues. Make sure to read and understand all SDS sheets and become familiar with all application procedures and best practices. Recommended for use by handyman or professionals. In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse. For more information, consult the material safety data sheet.

Performance Attributes

For coatings the cured film resists the following:

Alkaline Cleaners commonly used for cleaning.

Heat Seal Test: 230 Celsius (446 F) @ 45 psi for one second face to face ---------- Pass
The cured film exhibits high heat resistance while remaining flexible and will not crack when applied to thin film surfaces such as Mylar indicating it can withstand bending and stress without damage. Folding the Mylar in half will not crack the film or have any loss of adhesion.

Hard Tough Mar Resistance Film:

Pencil Hardness----------Surpasses 4H

- A pencil hardness of "Surpasses 4H" means the coating is a hard and highly resistant to scratching and gouging.

Konig (Pendulum)---------- 150 seconds

- A result of 150 seconds indicates a relatively hard, elastic, and viscoelastic film

Combining pencil hardness and pendulum hardness indicates that the cured film is relatively tough and resistant to marring, scratching, and other forms of surface deformation.

This balance of hardness and flexibility is a notable characteristic.

Chemical Resistance (Ambient Cure)

Applied coating without elevated temperatures and only relying on room temperature curing will result in a dry film that has excellent water resistance in a few hours and has chemical and alkali resistance in less than 24 hours. Elevated temperature will accelerate the resistance properties.

ALKALI RESISTANCE

After a 24-hour ambient cure, the dry film will have alkali resistance to a 4% caustic solution, when soaked for 15 minutes at 110 degrees Fahrenheit indicating it can withstand routine cleaning processes without degrading.

SOLVENT RESISTANCE

After less than 24 hours ambient cure, films that are 1.75 mils wet thickness had over 20 rubs Isopropyl Alcohol resistance.

ADHESION TO SUBSTRATES

The **PosiCoat** technology allows coatings to have exceptionally good adhesion.

Important Notice

Publish Date: 07-20-2025