



# VITE-AMINE 100 SLOW, MEDIUM AND FAST SET (SS/MS/FS)

Before beginning installation, thoroughly review all product and system information and diligently study the Safety Data Sheets (SDS). Initiate the installation only once you have gained a comprehensive understanding of the product and the system.

Prioritize workplace safety at all times - Personal Protective Equipment (PPE), as specified in the SDS, should be worn and utilized throughout the installation process. Remember, the longevity and performance of the final product hinge on proper surface preparation - the foundation of successful installations.

## PRODUCT NAME

VITE-AMINE 100 Slow, Medium and Fast Set (SS/MS/FS)

## PRODUCT DESCRIPTION & USE

The VITE-AMINE 100, a transparent and lustrous polyaspartic floor coating, proudly flaunts a remarkable >99% solid content. Notable characteristics include its UV stability, subtle aroma, and an impressive propensity to harden rapidly, ensuring minimum walk-on times and speedy resumption of services.

This multi-functional product serves various roles, including that of an exceptional thin-to-medium build body coat, a top layer, and even a primer on suitably primed surfaces where speed of service restoration is a priority.

Moreover, VITE-AMINE 100 stands out as a protective top layer over compatible epoxy finishes, flake flooring, quartz flooring, and a vast array of other decorative floor finishes requiring a UV-resistant coating.

Notably, the VITE-AMINE 100 Slow Set (SS) version emerges as an excellent choice as a binder for UV-resistant METALLIC-MIRAGE floor coatings, further demonstrating its versatility and wide-ranging applicability.

The VITE-AMINE 100 floor coating system adopts a novel approach to adaptability by offering three unique setting speeds: Slow Set (SS), Medium Set (MS), and Fast Set (FS).

Each of these distinctive Part A variants can be flawlessly integrated with a universally compatible VITE-AMINE 100 Part B (crosslinker). This innovative configuration enables the applicator to fine-tune the curing speed in line with the project's specifications.

Whether it's modifying for various applications or adapting to changing environmental conditions, VITE-AMINE 100 offers unrivaled versatility. More than just a floor coating, it emerges as a tailored solution designed to meet your unique requirements and circumstances.





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## ADVANTAGES & LIMITATIONS

### ADVANTAGES

- Superior UV resistance ensures enduring color and finish.
- The very low colour clear decorative finish augments the aesthetic appeal.
- The coating exhibits accelerated physical property development, even in cooler climates.
- As a versatile product, it can serve as the primer, mid-coat, and top coat, enabling one-day floor installations.
- On-site tinting is feasible using the appropriate ALLUVERSAL Colourant.

### LIMITATIONS

- The working timeframe may be challenging for novice applicators.
- Single coat applications exceeding 800 µm (32 mil) are not recommended.
- The subtle odor might be disagreeable to certain installers.
- While it offers some protection, it cannot completely prevent discoloration of non-UV stable coatings that are overcoated.
- Concrete with high moisture content and elevated alkalinity readings are unsuitable for this product as a primer.
- Rapid curing aromatic coatings and repair materials should be tested for compatibility, as aromatic substances may migrate through the film, leading to discoloration.

## COLOUR

Transparent coating in cured film. Field tinting is possible with ALLUVERSAL Colourant.

## APPLICATION & USE

### SURFACE PREPARATION

Ensure new concrete has been left to cure for at least 28 days. Eliminate any oil or grease residues using an appropriate surface degreaser. Thoroughly remove all curing agents, bond breakers, and foreign impurities.

Mechanically dislodge any laitance or weak and crumbling surfaces, then prepare the substrate through diamond grinding or shot blasting to attain a Concrete Surface Profile (CSP) of 2 or higher. Make sure to eliminate all dust before applying the material.

For more detailed instructions and guidance on surface preparation, refer to the "Alluvius Technical Bulletin SP-1".

### MIXING

Combine two parts of Component A with one part of Component B, maintaining a volume ratio of 2:1. Use a slow-speed drill, ensuring the speed remains below 300 RPM, and mix for a maximum duration of one minute until the mixture achieves uniformity. It is critical to exercise caution during this process to prevent the incorporation of excessive air into the product.

Once the mixing process is complete, immediately pour the blend onto the desired surface following a continuous, elongated pattern. For comprehensive instructions, techniques, and further guidance on the mixing process, please refer to our "Alluvius Technical Bulletin: Mixing of Multiple Component Alluvius Polymeric Materials".





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## APPLICATION

VITE-AMINE 100 can be applied using a T-bar applicator, a magic trowel, or an appropriate non-linting roller cover.

For optimal application, we recommend using either a magic trowel or a T-bar applicator initially, followed by a secondary application with a non-linting roller cover to ensure even coverage.

It's crucial not to overwork the product for an extended duration, as the coating will quickly thicken, building up viscosity within 10 minutes post-mixing.

Any disruption to the film beyond this time might lead to a curing process characterized by heightened levels of "orange peel" texture and potential markings from the roller and application process.

## COVERAGE RATE

VITE-AMINE 100 offers a versatile application rate ranging from 1.3 m<sup>2</sup> per liter to 5 m<sup>2</sup> per liter (53-200 sqft/gallon). This correlates to a Wet Film Thickness (WFT) of 770 µm down to 200 µm (30 mil to 8 mil), specifically when applied on smooth, non-permeable surfaces.

For roll coats, typical application rates range 2.5 m<sup>2</sup> per liter to 4 m<sup>2</sup> per liter (100-160 sqft/gallon). Do note, however, that surfaces that are porous or uneven, including those with a high surface area such as flake and quartz flooring, may result in lower coverage rates.

## RECOATING

Recoating with VITE-AMINE 100 can be seamlessly accomplished without the need for abrasion or sanding of subsequent layers, provided the reapplication is conducted within a 4-hour timeframe.

However, if you plan to recoat with VITE-AMINE 100 beyond this 4-hour window, it's necessary to sand the previously applied VITE-AMINE 100 layer to achieve a minimum profile of 125 microns, equivalent to a 120# mesh sanding screen.

**Prior to initiating the recoating process, it's crucial to ascertain that the surface is entirely devoid of any gloss, which can be achieved through thorough sanding.**

If the VITE-AMINE 100 coated surfaces have been allowed to cure for more than 5 days, additional testing will be necessary to determine the feasibility of reapplication without further surface preparation, in order to guarantee optimal adhesion. For comprehensive instructions on this topic, please contact our technical consultants.

## ENVIRONMENTAL CONDITIONS DURING INSTALLATION

Consideration of environmental conditions at the time of application is crucial. High humidity can hasten the curing process of VITE-AMINE 100 and subsequently shorten the working time. It is advisable to avoid the installation of VITE-AMINE when humidity levels exceed 80%.

VITE-AMINE can be effectively applied within a wide temperature range, from as low as -18°C (0°F) to as high as 35°C (95°F).





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## CLEAN UP

Thoroughly clean all tools and materials with solutions or solvents compatible with polyaspartic coatings, such as dibasic ester or xylene, where approved,. Rigorously wash hands and any exposed skin with warm water and soap.

Any clothing that comes into contact with the product should be promptly removed. Bear in mind that once the product has hardened, it can only be removed mechanically. Roller covers are single-use and should be safely discarded once the materials have solidified.

## PROPERTIES OF MATERIAL

PROPERTY	VALUE
Solids By Weight	>99% (+/- 1%)
Part A Density	1.0 – 1.1 g/cm <sup>3</sup>
Part B Density	1.07 – 1.17 g/cm <sup>3</sup>
Mix Ratio By Volume	2 Part A to 1 Part B (2:1 v/v)
Mix Ratio By Weight	2 Part A to 1.1 Part B (2:1.1 w/w)
Volatile Organic Compounds (VOC) ASTM D-2369	<10 grams per liter
Pot Life (Ca. @ 25°C)	Fast Setting (FS), Medium Setting (MS), and Slow Setting (SS) variants is 15, 30, and 40 minutes, assuming a 300-gram mass.
Gelation Time (Ca. @ 25°C)	Fast Setting (FS), Medium Setting (MS), and Slow Setting (SS) variants is 8, 16, and 40 minutes, with a 400 µm WFT.
Dry to Touch Time (Ca. @ 25°C)	Fast Setting (FS), Medium Setting (MS), and Slow Setting (SS) variants is 25, 40, and 90 minutes, when applied at 400 µm WFT
Recoating Time (Ca. @ 25°C)	Fast Setting (FS), Medium Setting (MS), and Slow Setting (SS) variants is 35, 55 and 150 minutes, when applied at 400 µm WFT
Open to Light Foot Traffic (Ca. @ 25°C)	Fast Setting (FS), Medium Setting (MS), and Slow Setting (SS) variants is 2, 4, and 18 hours, when applied at 400 µm WFT
Open to Heavy Traffic (Ca. @ 25°C)	Fast Setting (FS), Medium Setting (MS), and Slow Setting (SS) variants is 2, 4, and 18 hours, when applied at 400 µm WFT
Full Cure (Ca. @ 25°C)	Fast Setting (FS), Medium Setting (MS), and Slow Setting (SS) variants is 7, 7, and 10 days, when applied at 400 µm WFT
ASTM D-523 Gloss 60°	90-100
Adhesion to Dry Concrete	Cohesive Concrete Failure (1.5 MPa)
Adhesion to Damp Concrete	Not recommended





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## RESTRICTIONS

- Concrete substrates must be sound and have a minimum compressive strength of 21 MPa, with a minimum surface pull-off strength of 1.5 MPa.
- The substrate must be clean, removed of any standing water and free of all contaminants, e.g., dirt, oil, grease, coatings and surface treatments, etc.
- Humidity should be less than 80% at time of application.
- Substrates with moisture content equal to or greater than 4% will not be over coated without first contacting the manufacture in writing for further instructions.

## STORAGE & PACKAGING

Material is to be stored from 10°C (50°F) to 35°C (95°F) and away from direct sunlight. Materials are best used within 12 months of the date of manufacture if kept in original sealed containers.

VITE-AMINE 100 is available in 9.45 liter (5 gallon), 37.8 liter (10 gallon) and 1890 liter (500 gallon) kits or custom packaged upon reequest if purchased in volume.

## DISPOSAL

Please be aware that product containers will hold residual amounts of product and must be handled with care. Adhere to the warnings detailed on the labels at all times. All containers must be disposed of following federal, state, and local regulations to ensure responsible waste management.

## HEALTH & SAFETY PRECAUTIONS

Please consult the Safety Data Sheet (SDS) for comprehensive guidance on handling VITE-AMINE 100 safely.

- During the mixing and application process, always wear gloves resistant to chemicals, eye protection, approved respiratory equipment, and protective clothing, as stipulated in the most recent version of the SDS
- Ensure that your workspace is well-ventilated and avoid inhaling any fumes
- VITE-AMINE 100 is known to sensitize skin. If the product comes into contact with your skin, cleanse immediately with warm soapy water and change out of contaminated clothing. If dermatitis symptoms occur, seek immediate medical attention.

## ADDITIONAL NOTES

- The specifics provided for working time, cure time, and coverage should not be considered absolute; they are subject to change based on site conditions
- We strive to provide typical values to be used as a reference
- Prior to full-scale application, it is recommended to test VITE-AMINE 100 for suitability on a small area of the actual job site

## DISCLAIMER

The data provided in this technical document is a culmination of our laboratory testing and practical experience. However, this document does not constitute a guarantee for the product's properties in terms of any legally stipulated warranties. Should you need further clarification or information to make an appropriate assessment, we encourage you to reach out to us directly.

All Alluvius products are manufactured according to strict specifications, and while we can vouch for the quality of the product itself, we do not control the conditions under which the products are transported, stored, or handled, and we cannot predict or oversee the conditions under which they will be used.

Therefore, we strongly advise each user to study this product data sheet in light of their intended handling and usage of the product and to conduct comprehensive tests before adapting the product for their specific uses.

Please note that we reserve the right to alter the provided data without any prior notice.

