Product Data Sheet

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

EP-2020 MV/LV (Medium Viscosity and Low Viscosity)

PRODUCT DESCRIPTION & USE

EP-2020 MV/LV is a clear, versatile, 100% solid epoxy floor coating with a high-gloss finish and a degree of UV resistance. It is designed to be surface-tolerant, catering to a variety of substrates.

This premium coating serves a multitude of roles, performing excellently as a medium to high-build body coat, top coat, or even a primer on appropriately prepared surfaces. Its compatibility with various epoxy coatings, flake flooring, quartz flooring, marble, stone, and other decorative floor finishes allows it to be an ideal choice for finishing coats, especially in scenarios where a clear aesthetic coating is necessary. Note, however, that while it offers some UV resistance, it is not completely stable under prolonged UV exposure.

ADVANTAGES & LIMITATIONS

ADVANTAGES

- Offers a transparent decorative finish
- Multifunctional product that can serve as a primer, mid-coat and top-coat.
- On-site tinting available with ALLUVERSAL Colourant
- Seamless, impervious coating with a low-profile finish

LIMITATIONS

- Moderate pot life and application duration might not be suitable for inexperienced applicators
- Inadequately prepared surfaces can lead to potential coating failures
- Contaminated substrates may result in surface tension irregularities
- Not designed for outdoor applications

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"

EP-2020 MV/LV

MIXING

Combine two parts of Component A with one part of Component B by volume (2:1 v/v) and mix using a slow-speed drill maintaining a speed below 300 RPM for two minutes until a uniform mixture is achieved. Exercise caution to prevent excess air from being incorporated into the product. Following the mixing process, promptly pour the mixture onto the desired surface in a continuous, elongated pattern. For more detailed instructions, techniques, and guidance on mixing, refer to the "Alluvius Technical Bulletin: Mixing of Multiple Component Alluvius Polymeric Materials".

EP-2020 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.

COVERAGE RATE

EP-2020 offers a versatile application rate ranging from 0.5 m2 per to 5 m2 per litre (20-200 sqft/gallon). This correlates to a wet film thickness of 2000 μ m down to 200 μ m (80 mil to 8 mil), specifically when applied on smooth, non-permeable surfaces. For roll coats, typical application rates range 2.5 m2 per litre to 4 m2 per litre (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

For recoating EP-2020, no sanding or abrading is needed if the subsequent coating is applied within a 24-hour window. If this recoating window is exceeded, the previous coat of EP-2020 will need to be sanded down to a minimum profile of 125 microns (120# mesh sanding screen).

ENVIRONMENTAL CONDITIONS DURING INSTALLATION

The environmental conditions at the time of application must be taken into account. EP-2020 should not be applied if the humidity exceeds 80%. The product is suitable for application in temperatures ranging from $10^{\circ}C$ ($50^{\circ}F$) to $38^{\circ}C$ ($100^{\circ}F$).

CLEAN UP

Thoroughly clean all tools and materials with solutions or solvents compatible with epoxy coatings, such as benzyl alcohol 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.

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PROPERTIES OF MATERIAL

PROPERTY	VALUE
Solids By Volume	100% (+/- 1%)
Solids By Weight	100% (+/- 1%)
Part A Density	1.06 – 1.16 g/cm3
Part B Density	0.96 – 1.06 g/cm3
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 (2.2:1 w/w)
Volatile Organic Compounds (VOC)ASTM D-2369	>10 grams per litre
Pot Life (Ca. @ 25°C)	35 minutes (100 gram mass)
Gelation Time (Ca. @ 25°C)	50 minutes
Dry to Touch Time (Ca. @ 25°C)	8 hours
Recoating Time (Ca. @ 25°C)	10 hours to 24 hours
Open to Light Foot Traffic (Ca. @ 25°C)	18 hours
Open to Heavy Traffic (Ca. @ 25°C)	72 hours
Full Cure (Ca. @ 25°C)	7 days
Combined mix viscosity (Ca. @ 25°C)	400-600 CPS (at time of mixing)
Adhesion to Dry Concrete	Concrete Failure (1.5 MPa)
Adhesion to Damp Concrete	Concrete Failure (1.5 MPa)
Shore D Hardness ASTM D-2240	70-80

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 the time of application.
- Substrates with moisture content equal to or greater than 4% will not be over-coated without first contacting the manufacturer 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 24 months of the date of manufacture if kept in original sealed containers.

EP-2020 is available in 15 litre (4 gallon), 56.7 litre (15 gallon), 600 litre (159 gallon) and 2835 litre (750 gallon) kits or custom packaged upon request if purchased in volume.

A EP-2020 MV/LV

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 EP-2020 safely.

- EP-2020's components A and B are classified as hazardous chemicals
- 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
- EP-2020 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.
- Prior to full-scale application, it is recommended to test EP-2020 for suitability on a small area of the actual job site

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

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 contact 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.