BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET

Sikalastic® P 281 FS

(formerly MSeal P 281FS)

Medium-viscosity, low-VOC methyl-methacrylate primer for porous concrete

PRODUCT DESCRIPTION

Sikalastic® P 281 FS is a solvent-free, low-VOC, 3-component medium-viscosity methyl methacrylate (MMA) primer for use with the Sikalastic® Vehicular Traffic 2900 and Sika®Emaco-6000 methacrylate repair mortar. Sikalastic® P 281 FS has superior adhesion to concrete and is ideal as a primer for porous concrete surfaces.

CHARACTERISTICS / ADVANTAGES

- Fully cures within one (1) hour, reducing downtime for a quick return to service
- Great adhesion to concrete, ideal for porous concrete substrates
- Can be applied down to -1 °C (30 °F) to meet a wide range of application and timing requirements

WHERE TO USE

- Stadiums
- Parking garages
- Plaza decks
- Loading docks
- Garbage rooms
- Commercial construction
- Building and restoration

PRODUCT INFORMATION

Packaging	17 L (4.5 gal) pail	
Colour	Clear Amber (with Sikalastic® 908 FS Additive)	
Shelf Life	2 years when properly stored	
Storage Conditions	Keep stored in cool, dry environment, and out of direct sunlight	
Solid content	100 %	
Viscosity	220–330 cps	ASTM C2393

TECHNICAL INFORMATION

Shore D Hardness	83	ASTM D2240
Tensile Strength	29 MPa (4250 psi)	ASTM D638
Elongation	@ Break: 3 %	ASTM D638
Water Absorption	< 0.1 %	ASTM D570

APPLICATION INFORMATION

Mixing Ratio

Mixing Chart shows amount of Sikalastic® 918 FS (in volume ounces) added to one (1) US gallon of Sikalastic® P 281 FS mixed 3:1 with Sikalastic®-908 FS. Sikalastic® 918 FS is the catalyst for Sikalastic® P 281 FS at all temperatures

Temperature	Sikalastic® 918 FS (fl. oz.)
-1 °C (30 °F)	9
1 °C (33 °F)	8
2 °C (35 °F)	7
4 °C (40 °F)	6.5
7 °C (45 °F)	6
10 °C (50 °F)	6
13 °C (55 °F)	5
16 °C (60 °F)	5
18 °C (65 °F)	5
21 °C (70 °F)	4
24 °C (76 °F)	4
27 °C (80 °F)	4
29 °C (85 °F)	4
32 °C (90 °F)	4

Required amount of Sikalastic®-918 FS (in grams) for one (1) litre of resin, based on temperature:

Temperature	Sikalastic®-918FS (g)
-1 °C (30 °F)	87
1 °C (33 °F)	77
2 °C (35 °F)	67
4 °C (40 °F)	63
7 °C (45 °F)	58
10 °C (50 °F)	58
13 °C (55 °F)	48
16 °C (60 °F)	48
18 °C (65 °F)	48
21 °C (70 °F)	39
24 °C (76 °F)	39
27 °C (80 °F)	39
29 °C (85 °F)	39
32 °C (90 °F)	39

Yield

All coverage rates are approximate. Coverage rates will vary with the profile/porosity of substrate. Typically, one (1) US gallon of Sikalastic® P 281 FS will achieve a coverage rate of 9.3 m^2 (100 ft^2), at 16 mil per gallon (minimum).

SYSTEMS

Systems

Sikalastic® P 281 FS is used as a primer with:

BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

LIMITATIONS

Proper application is the responsibility of the user. Field visits by Sika personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite. Make certain the most current versions of product data sheet and SDS are being used. It is critical that the instructions listed in the Safety Data Sheet for every component of the system be read, understood, and followed.

Important: MMA resins are flammable liquids in their uncured state.

- Smoking, open flames or sparks should not be permitted during the handling of the product.
- Explosion safe ventilation must be used during the application to minimize vapour collection in the installation area and to improve overall air quality for the crew.
- Proper air flow is critical to curing MMA materials. The use of fans is mandatory where airflow is restricted.
- If a vapour drive is present or suspected, contact your local Sika Technical Sales Representative prior to system application.
- Not for use at application temperatures over 32 °C (90 °F) or below -1 °C (30 °F).
- Not for use in areas exposed to strong solvents. Contact Sika Canada Technical Service.
- Install at recommended thickness to ensure proper curing and leveling.
- Each application must be completely cured and return to ambient temperature prior to the next application.
- Use clean pails when mixing to avoid the possibility of improper curing.
- The minimum application temperature is -1 °C (30 °F).
- Do not apply to concrete that is outgassing.
- Warm temperatures should not shorten working time, unless its above the maximum temperature recommended.
- Concrete should have a minimum compressive strength of 21 MPa (3000 psi) and be cured for a minimum of 28 days.
- Do not apply Sikalastic® P 281 FS to concrete slabs on grade, unvented metal pan decks, or split slab applications with a waterproofing membrane between slabs. Contact Sika Canada Technical Service.
- Be sure to allow for movement in the deck by the proper design and use of expansion and control joints.
- When substrates are over 32 °C (90 °F) or under -1 °C (30 °F) or when applying to decks containing between slab membranes, contact Sika Canada Technical Service.
- The best method to ensure the proper wet film thickness is the use of a grid system. Divide the surface to be coated into grids and calculate the square footage of each. Refer to the coverage rate provided to determine the quantity of coating needed for each grid to arrive at the required mil thicknesses.
- Avoid application when inclement weather is present or imminent.
- Do not apply to damp, wet, or contaminated surfaces.
- Sikalastic® P 281 FS is not suitable for use where chained or metal-studded tires will be used.
- CAD & PDF deck coating details are available for download from our website.

ENVIRONMENT, HEALTH & SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Concrete
Concrete must be fully cured (28 days), structurally sound, clean, and dry (ASTM D4263). All concrete surfaces (new and old) must be shot blasted to remove previous coatings, laitance, and all miscellaneous surface contamination and to provide a profile for proper adhesion. Abrasive shot blasting must occur after concrete repair has taken place. Acid-etching is not permitted. The proper profile should be a minimum of ICRI–CSP3 (as described in ICRI document 310.2R - 2013.) For balconies and other pedestrian areas with limited space or access to shot-blasting, alternative mechanical methods can be used to achieve the recommended surface profile.

Repair voids and delaminated areas with SikaEmaco®-6000. When time permits, SikaEmaco®-1060 or SikaEmaco®-1060 EX may be used for repair purposes. Wait 24 hours before applying the Sikalastic® Vehicular Traffic 2900 system. Prime with Sikalastic® P 281 FS before applying SikaEmaco®-6000. Measure three (3) quarts of resin and one (1) quart of Sikalastic®-908 FS into the pail and add the proper amount of powder

hardener. See the mixing chart below. Mix with a drill mixer for 45 seconds or until the powder hardener is completely dissolved.Apply primer at approximately 100 ft² (9.3 m²) per mixed gallon.

MIXING

Add three (3) quarts of Sikalastic® P 281 FS and one (1) quart of Sikalatic®-908 FS into pail. Blend for about 30 seconds. Add the appropiate amount of Sikalastic®-918 FS powder hardener to the liquids based on temperature. Mix for 45 seconds or until the Sikalastic®-918 FS is completely dissolved.

Refer to Mixing Ratio chart for the required amount of Sikalastic®-918 FS (in volume ounces or grams) for one (1) gallon or one (1) liter of mixed resin, based on temperature.

APPLICATION

Apply the properly mixed primer to the properly prepared substrate at a rate of approximately 100 ft² (9.3 m²)/US gal or 16 mil thickness. Allow the primer to cure tack-free for an even, satin like matte finish. Re-prime any dry spots.

CURING TREATMENT

Sikalastic® P 281 FS fully cures within one (1) hour when properly installed.

CLEAN UP

Clean tools with Sikafloor®-100 CLN Pronto, an MMA solvent. Other solvents such as xylene or acetone may also be used.

MAINTENANCE

CLEANING

See Sikalastic® Traffic maintenance technical bulletin. Regular cleaning and maintenance will prolong the life of all polymer flooring systems, enhance their appearance, and reduce any tendency to retain dirt.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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LEGAL NOTES