BUILDING TRUST
CONSTRUIRE LA CONFIANCE

PRODUCT DATA SHEET

Sikalastic® P 280 FS

(formerly MSeal P 280FS)

SIKALASTIC® P 280 FS IS AN MMA SOLVENT-FREE, TWO-COMPONENT, 100% REACTIVE, LOW-VISCOSITY PRIMER.

PRODUCT DESCRIPTION

Sikalastic® P 280 FS is an MMA solvent-free, two-component, 100% reactive, low-viscosity primer.

WHERE TO USE

- Stadiums
- Parking Garages
- Plaza Decks
- Loading Docks
- Garbage Rooms
- Commercial Construction
- Building and Restoration

CHARACTERISTICS / ADVANTAGES

- Rapid cure allows for quick installation with minimal facility downtime
- Low-temperature cure extends application season

APPROVALS / CERTIFICATES

- CSA S413
- ASTM C957

PRODUCT INFORMATION

CSC MasterFormat®	**07 18 00 | TRAFFIC COATINGS**	
Packaging	17 L (4.5 US gal.) pail; 185.5 L (49 US gal.) drum	
Shelf Life	2 years	
Storage Conditions	Store in unopened containers in a cool, dry and clean area.	
Solid content by weight	100%	(ASTM D 1259)

TECHNICAL INFORMATION

Tensile Strength	24.13 MPa (3500 psi)	(ASTM D 412)
	Elongation	
	1.3%	(ASTM D 412)
Electrical Resistivity	Volume: 2.5 x 10^{15}, Surface: 8 x 10^{12}, ohm/cm	(ASTM D 257)

Water Absorption	<0.1% over 24 hours	(ASTM D 570)

SYSTEMS

Systems	Sikalastic® Vehicular Traffic 2900

APPLICATION INFORMATION

Yield	approx 2.46 m^2/L (100 ft^2/US gal.) at 16 mils w.f.t
Layer Thickness	16 mils w.f.t
Ambient Air Temperature	between -1 °C and 32 °C (30 °F and 90 °F)
Dew Point	Substrate temperature must be at least 3 °C (5.5 °F) above measured dew point temperature.
Substrate Temperature	between -1 °C and 32 °C (30 °F and 90 °F)
Substrate Moisture Content	Moisture content of concrete substrate must not exceed 4 % by mass (p.b.w. – part by weight) as measured with a Tramex® CM/E concrete moisture meter on a mechanically-prepared surface (mechanical preparation to ICRI / CSP 3 minimum). Do not apply to concrete substrate with moisture levels exceeding 4 % mass (p.b.w. – part by weight) as measured with the above mentioned equipment. If moisture content of concrete substrate exceeds 4 % by mass (p.b.w. – part by weight) as measured with Tramex® CM/E concrete moisture meter, contact your local Sika Representative.

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.

ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

- If a vapor drive is present or suspected, please consult with your local Sika representative prior to system application.
- Not for use in areas exposed to strong solvents (consult Sika Technical Service).
- Protect or remove food items prior to application to avoid any possible contamination.
- Proper airflow is critical to curing MMA materials. The use of fans is mandatory where airflow is restricted.
- The minimum application temperature is -1 °C (30 °F).
- Do not apply to concrete that is outgassing.
- Warm temperatures will shorten working time; plan work accordingly.
- Concrete should have a minimum compressive strength of 21 MPa (3,000 psi) and be cured for a minimum of 28 days.
- Do not apply Sikalastic® Vehicular Traffic 2900 to concrete slabs on grade, unvented metal pan decks, or split slab applications with a waterproofing membrane between slabs. Contact Sika Technical Services.
- Be sure to allow for movement in the deck by the proper design and use of expansion and control joints.
- Select the proper type and amount of aggregate to achieve the desired slip resistance.
- Contact Technical Service when substrates are over 32 °C (90 °F) or under -1 °C (30 °F) or when applying to decks containing between slab membranes.
- 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 chart 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.
- Not suitable for use where chained or metal-studded tires will be used.
- 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.
- CAD & PDF deck coating details are available for download from our website, Sika Customer Support

can direct you to the site.
- On steep ramps in excess of 15%, contact your local Sika representative. Do not use self-leveling grade products on slopes greater than 15%. Do not coat over expansion joints.

SUBSTRATE PREPARATION

Concrete

Concrete must be fully cured (28 days), structurally sound, clean, and dry (ASTM D 4263). 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 a 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 6-8 hours before applying the Sikalastic® Vehicular Traffic 2900 system.
- Prime with Sikalastic® P 280 FS before applying SikaEmaco®-6000. Measure 3 quarts of resin and 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 30 seconds or until the powder hardener is completely dissolved.
- Apply primer at approximately 100 ft2 (9.3 m2) per mixed gallon.
- Measure, add, and mix the SikaEmaco®-6000 Resin, Powder Component, and necessary aggregate (if required) in the proportions recommended below.
- Use mixture to repair any damaged concrete, or to slope any areas as needed.
- Once cured, the material must be re-primed before the topping system is applied.
- Proceed with the application as usual.
- All units must be within the specified pot life.

Aggregate Extension

Overlay Thickness	% by Weight	Grain Size	Weight in Pounds	Per Batch of SikaEmaco®-6000
¼"	–	–	–	12.5
½"	10%	1/16 – 1/8"	4	7.2
¾"	25%	1/16 – 1/8"	8	5.3
1"	50%	3/16 – 3/8"	15	4.4
1-½"	75%	3/16 – 3/8"	25	3.5
2"	100%	¼ – ¾"	35	2.3
≥ 3"	125%	¼ – ¾"	44	2.2

Volume	Cubic Feet
-	0.26
1 – ¼ quarts, 2 – ½ quarts	0.30
2 – ½ quarts	0.33
5 quarts	0.37
2 gallons	0.44
2.5 gallons	0.50
3 gallons	0.55

SURFACE PREPARATION

Surface Pre-stripping And Detailing

1. For non-moving joints and cracks less than 1⁄16" (1.6 mm) wide, pre-stripe with Sikalastic® P 280 FS 1" (25 mm) beyond all surfaces that require detail work, using a short-nap roller. Just before the application of Sikalastic® P 280 FS, remove all dust, dirt, and contaminants. Allow Sikalastic® P 280 FS to dry tack-free. On the same day, coat primed surfaces with 25 mils of Sikalastic® M 290 FS. Sikalastic® M 290 FS must be applied to fill and overlap the joint or crack 2" (51 mm) on each side. Feather the edges.
2. NOTE: For non-moving joints and cracks, prime the crack before applying Sikalastic® M 290 FS at 25 mils using a notched trowel - for faster detailing.
3. Dynamic cracks and joints over 1⁄16" (1.6 mm) wide must be routed to a minimum of 1/4 by 1/4" (6 by 6 mm) and cleaned. Install bond breaker tape to prevent adhesion to the bottom of the joint. Prime joint faces only with Sika® Primer-173 and fill with Sikaflex® SL 2 or Sikaflex® NP 2. For joints deeper than ¼" (6 mm), use an appropriate backer rod. For cracks, sealant should be flush with the adjacent surface. For expansion joints, the sealant should be slightly concave.
4. Sealed joints 1" (25 mm) wide or less can be coated over with the Sikalastic® Traffic system. NOTE: SYSTEM IS NOT TO BE APPLIED ON PLYWOOD Expansion joints exceeding 1" (25 mm) wide, including the primary wide expansion-joint system, are not to be coated so they can perform independently of the deck coating system.
5. Form a sealant cant into the corner at the junction of all horizontal and vertical surfaces (wall sections, curbs, columns) by priming with Sika® Primer-173 and applying a 1" (25 mm) wide bead of Sikaflex® NP 2. Tool to form a 45° cant. Apply masking tape to the vertical surfaces 4–5" (102–127 mm) above the sealant cant to provide a clean termination of the vertical detail coat. After the sealant has cured, prime with Sikalastic® P 280 FS at 100 SF/gallon. Apply 25 wet mils (0.64 mm) of Sikalastic® M 290 FS over the cured cant up to the masking tape and 4" (102 mm) onto the deck surface.
6. NOTE: For a non-moving cant bead, Sikafloor®-100 PAS Pronto can be used for rapid cure.
7. Where the coating system will be terminated and no wall, joint, or other appropriate break exists, cut a 1/8 by 1/8" (3 by 3 mm) keyway into the concrete. Fill and coat the keyway during the application of Sikalastic® M 290 FS.

MIXING

Mixing

Measure 3 volume of Sikalastic® P 280 FS and 1 volume of Sikalastic®-908 FS into the pail, blend, and add the proper amount of powder hardener. See the mixing chart below. Mix with a drill mixer for 30 seconds or until the powder hardener is completely dissolved.

Required amount of Sikalastic®-918 FS (in volume ounces) for one-US gallon resin, based on temperature:

°C (°F)	Sikalastic® P 280 FS with Sikalastic®-908 FS
-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 liter resin, based on temperature:

°C (°F)	Sikalastic® P 280 FS with Sikalastic®-908 FS
-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

APPLICATION

Sikalastic® 2900 System is a multiple-component system that utilizes a methyl-methacrylate (MMA) resin. It is critical that the instructions listed in the Safety Data Sheet and on the product label for every component of the system be read, understood, and followed. 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 vapor collection in the installation area and to improve overall air quality for the crew. All foodstuffs must be removed during installation of the system.

Heavy-duty Traffic System

1. Apply the properly mixed Sikalastic® P 280 FS/Sikalastic®-908 FS resin to the properly repaired concrete or properly prepared aged coating at approximately 100 ft² (9.3 m²) per mixed gallon or about 16 mils. Allow the primer to cure tack-free to an even, satin-like gloss and re-prime any dry spots.
2. Apply the properly mixed Sikalastic® M 290 FS at 32 ft² (3 m²) per gallon or 50 mils, using a notched tool (or trowel). Material may not be completely tack-free upon cure. Do NOT backroll the Sikalastic® M 290 FS.
3. Apply the properly mixed Sikalastic® TC 297 FS at 80 ft² (7.4 m²) per gallon, rolling on at a 20 mil thickness.
4. Immediately broadcast 16–30 mesh, rounded silica sand into the wet coating to refusal at the rate of 20–30 lbs per 100 ft² (1.0–1.5 kg/m²). Immediately after the aggregate is broadcast and while the coating is still wet, blow any excess aggregate via a portable blower forward into the wet coating.
5. Apply the properly mixed Sikalastic® TC 299 FS at 80 ft² (7.4 m²) per gallon, rolling on at a 20 mil thickness using a squeegee.
6. All components of the Sikalastic® Traffic 2900 system fully cure in approximately one hour when properly installed.

Extra Heavy-duty Traffic System

1. Apply the properly mixed Sikalastic® P 280 FS/Sikalastic®-908 FS resin to the properly repaired concrete or properly prepared aged coating at approximately 100 ft² (9.3 m²) per mixed gallon or about 16 mils. Allow the primer to cure tack-free to an even, satin-like gloss and re-prime any dry spots.
2. Apply the properly mixed Sikalastic® M 290 FS at 20 ft² (1.9 m²) per gallon or 80 mils, using a notched tool (or trowel). Material may not be completely tack-free upon cure. Do NOT backroll the Sikalastic® M 290 FS.
3. Apply the properly mixed Sikalastic® TC 297 FS at 40 ft² (3.7 m²) per gallon, rolling on at a 40 mil thickness.
4. Immediately broadcast 16–30 mesh, rounded silica sand into the wet coating to refusal at the rate of 20–30 lbs per 100 ft² (1.0–1.5 kg/m²). After the aggregate is broadcast and while the coating is still wet, blow any excess aggregate via a portable blower

forward into the wet coating.
5. Apply the properly mixed Sikalastic® TC 299 FS at 80 ft² (7.4 m²) per gallon, rolling on at a 20 mil thickness using a squeegee.
6. Immediately broadcast 16–30 mesh, rounded silica sand into the wet coating to refusal at the rate of 20–30 lbs per 100 ft² (1.0–1.5 kg/m²). After the aggregate is broadcast and while the coating is still wet, blow any excess aggregate via a portable blower forward into the wet coating.
7. Apply the properly mixed Sikalastic® TC 299 FS at 80 ft² (7.4 m²) per gallon, rolling on at a 20 mil thickness using a squeegee.
8. All components of the Sikalastic® Traffic 2900 system fully cure in approximately one hour when properly installed.

CURING TREATMENT

All components of the Sikalastic® Traffic 2900 system fully cure within one hour when properly installed. Extend the curing time in cool-weather conditions.

CLEAN UP

Clean tools with Sikafloor®-100 CLN Pronto, an MMA solvent. Other solvents such as xylene or acetone may also be used. Collect and dispose of all site waste.

MAINTENANCE

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.

LEGAL NOTES

Sika Canada Inc.
Head Office
601, avenue Delmar
Pointe-Claire, Quebec
H9R 4A9
1-800-933-SIKA
www.sika.ca

Other locations
Boisbriand (Quebec)
Brantford; Cambridge;
Sudbury; Toronto (Ontario)
Edmonton (Alberta)
Surrey (British Columbia)