ArmorSeal Heavy Duty Floor Coatings \

ARMORSEAL®
FLOOR-PLEX® 7100 PRIMER
WATER BASED EPOXY FLOOR COATING

PART A	B70W410	OFF WHITE
PART B	B70V400	HARDENER

Revised 11/10

PRODUCT INFORMATION

8.16

PRODUCT DESCRIPTION

ARMORSEAL FLOOR-PLEX 7100 PRIMER is a heavy duty, low VOC, low odor, two component, catalyzed, water borne, polyamide epoxy floor primer. Provides overall performance comparable to that of most solvent borne epoxy floor systems. Designed for use under ArmorSeal finish coats.

- Penetrates into the concrete to enhance adhesion.
- High performance primer
- Water clean up
- Resistant to hot tire pick-up
- Outstanding application properties

PRODUCT CHARACTERISTICS

Finish:	Low Gloss
Color:	Off White
Volume Solids:	46% ± 2%, mixed
Weight Solids:	59% ± 2%, mixed
VOC (EPA Method 24):	<250 g/L; 2.1 lb/gal, mixed
Mix Ratio:	1:1 by volume

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.5** (88)	**5.0** (125)
Dry mils (microns)	**1.5** (40)	**2.0** (50)
~Coverage sq ft/gal (m^2/L)	**368** (9.0)	**490** (12.0)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**736** (18.0)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1 hour	45 minutes	30 minutes
To recoat*:	12 hours	8 hours	6 hours
Foot traffic:	72 hours	48 hours	36 hours
Heavy traffic:	96 hours	72 hours	48 hours
Pot Life:	6 hours	6 hours	3 hours
Sweat-in-Time:	15 minutes	15 minutes	10 minutes

Drying time is temperature, humidity, and film thickness dependent.
*If recoating after 30 days, abrade surface first.

Shelf Life:	12 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C)
Flash Point:	>120°F (49°C), PMCC, mixed
Reducer/Clean Up:	Water

RECOMMENDED USES

For use as part of a system over prepared concrete or wood floors, aisleways, and stairwells.

Durable epoxy floor primer for use in industrial and commercial environments, such as:

- Hospitals
- Schools
- Clean rooms
- Manufacturing facilities
- Laboratories
- Food processing areas
- Where a pigmented primer is required
- Industrial, commercial, or marine applications
- Suitable for use in USDA inspected facilities

PERFORMANCE CHARACTERISTICS

Substrate*: Concrete
Surface Preparation*: Clean, dry, sound
System Tested*:
1 ct. ArmorSeal Floor-Plex 7100 Primer @ 2.0 mils (50 microns) dft
2 cts. ArmorSeal Floor-Plex 7100 Finish @ 2.0 mils (50 microns) dft/ct
*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS10 wheel, 1000 cycles, 1 kg load	35 mg loss
Adhesion	ASTM D4541	941 psi
Direct Impact Resistance, on steel	ASTM D2794	75 in. lb.
Dry Heat Resistance	ASTM D2485	200°F (93°C), intermittent 250°F (121°C)
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Hot Tire Pick-up	ITM @ 140°F (60°C)	Passes
Pencil Hardness	ASTM D3363	HB
Thermal Shock	ASTM D2246, 10 cycles	Passes

continued on back

ArmorSeal Heavy Duty Floor Coatings \

ARMORSEAL®
FLOOR-PLEX® 7100 PRIMER
WATER BASED EPOXY FLOOR COATING

PART A	B70W410	OFF WHITE
PART B	B70V400	HARDENER

PRODUCT INFORMATION

8.16

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Concrete Floors, unpainted:			
1 ct.	ArmorSeal Floor-Plex 7100 Primer	1.5-2.0	(40-50)
2 cts.	ArmorSeal Floor-Plex 7100 Finish	1.5-2.0	(40-50)
Concrete Floors, unpainted:			
1 ct.	ArmorSeal Floor-Plex 7100 Primer	1.5-2.0	(40-50)
2 cts.	ArmorSeal 1K Urethane	2.0-4.0	(50-100)
Concrete Floors, previously painted:			
1 ct.	Spot prime bare areas with 1 ct. ArmorSeal Floor-Plex 7100 Primer	1.5-2.0	(40-50)
2 cts.	ArmorSeal Floor-Plex 7100 Finish	1.5-2.0	(40-50)

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Do not use hydrocarbon solvents for cleaning.

Minimum recommended surface preparation:
Concrete & Masonry: SSPC-SP13/NACE 6, or ICRI No. 310.2, CSP 1-3

Surface Preparation Standards

Condition of Surface		ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature:	50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	75% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:	1 gallon (3.78L) and 5 gallon (18.9L) containers
Weight:	10.62 ± 0.2 lb/gal ; 1.27 Kg/L mixed, may vary by color

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL®
FLOOR-PLEX® 7100 PRIMER
WATER BASED EPOXY FLOOR COATING

PART A	B70W410	OFF WHITE
PART B	B70V400	HARDENER

Revised 11/10

APPLICATION BULLETIN

8.16

SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Do not use hydrocarbon solvents for cleaning.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer required.

Follow the standard methods listed below when applicable:
ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
ICRI No. 310.2 Concrete Surface Preparation.

Wood
Surface must be clean, dry and sound. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped or burned, sanded and spot primed before full coat of primer is applied. All nail holes or small openings must be properly caulked.
Surface must be clean, dry and sound. Remove any oils and dirt from the surface using a degreasing solvent or strong detergent. Sand to remove any loose or deteriorated surface wood and to obtain a proper surface profile.

Previously Painted Surfaces
If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, or if this product attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	75% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up ..... Water

Brush
Brush.....Nylon/Polyester or Natural Bristle
Reduction.....as needed up to 10% by volume

Roller
Cover .....1/4"-3/8" woven with solvent resistant core
Reduction.....as needed up to 10% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.

continued on back

ArmorSeal Heavy Duty Floor Coatings \

ARMORSEAL®
FLOOR-PLEX® 7100 PRIMER
WATER BASED EPOXY FLOOR COATING

PART A	B70W410	OFF WHITE
PART B	B70V400	HARDENER

APPLICATION BULLETIN

8.16

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine one part by volume of Part A with one part by volume of Part B. Thoroughly agitate the mixture with power agitation. Allow the material to sweat-in as indicated. Re-stir before using.

If reducer is used, add only after both components have been thoroughly mixed, after sweat-in.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.5** (88)	**5.0** (125)
Dry mils (microns)	**1.5** (40)	**2.0** (50)
~Coverage sq ft/gal (m^2/L)	**368** (9.0)	**490** (12.0)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**736** (18.0)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1 hour	45 minutes	30 minutes
To recoat*:	12 hours	8 hours	6 hours
Foot traffic:	72 hours	48 hours	36 hours
Heavy traffic:	96 hours	72 hours	48 hours
Pot Life:	6 hours	6 hours	3 hours
Sweat-in-Time:	15 minutes	15 minutes	10 minutes

Drying time is temperature, humidity, and film thickness dependent.

*If recoating after 30 days, abrade surface first.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

PERFORMANCE TIPS

During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with water.

Always test adhesion by applying a test patch of 2-3 square feet. Allow to dry one week before checking adhesion.

Temperatures above 77°F (25°C) will shorten pot life.

Do not use hydrocarbon solvents for cleaning.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.