



ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® 33 EPOXY PRIMER/SEALER

PART A
PART A
PART B

B58AQ33
B58CQ33
B60VQ33

LIGHT GRAY
CLEAR
HARDENER

Revised: October 17, 2018

PRODUCT INFORMATION

8.20

PRODUCT DESCRIPTION

ARMORSEAL 33 EPOXY PRIMER/SEALER is a low viscosity, high solids, high build, fast cure, epoxy primer designed for use under ArmorSeal 650 or where a high build primer is needed. This primer/sealer enhances adhesion by penetrating into the concrete substrate and helps reduce bubbling and pinholes that may occur when coating porous surfaces with high build coatings.

PRODUCT CHARACTERISTICS

Finish:	Gloss
Color:	Light Gray, Clear
Volume Solids:	100%, mixed
VOC (EPA Method 24):	<50 g/l; 0.42 lb/gal, mixed
Mix Ratio:	2 components, premeasured 2.85:1 by volume

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	7.0 (175)	9.0 (225)
Dry mils (microns)	7.0 (175)	9.0 (225)
~Coverage sq ft/gal (m ² /L)	180 (4.4)	230 (5.6)
Theoretical coverage sq ft/gal (m ² /L) @ 1 mil / 25 microns dft	1604 (39.4)	

NOTE: Apply by squeegee or roller only.

Drying Schedule @ 8.0 mils wet (200 microns):

@ 72°F/22°C

50% RH

To touch:	4-6 hours
To recoat:	
minimum:	6 hours
maximum:	24 hours
To cure:	7 days

If maximum recoat time is exceeded, abrade surface before topcoating.

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

Pot Life: 30 minutes

Sweat-in-Time: None required

Shelf Life:	36 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C)
Flash Point:	>200°F (93°C), PMCC, mixed
Reducer:	Not recommended
Clean Up:	Reducer #54, R7K54

RECOMMENDED USES

- For use over prepared concrete
- As a high build primer
- Ideal for use on porous concrete or over a rough surface profile
- Use when a pigmented primer is required
- For industrial, commercial, and marine applications
- For use as part of the ArmorQuartz system, a decorative broadcast color quartz system
- Suitable for use in USDA inspected facilities

PERFORMANCE CHARACTERISTICS

- Abrasion resistant
- Fast dry
- Chemical resistant
- Impact resistant
- Low odor
- 100% solids
- Dry heat resistance: 180°F (82°C)

Test Name	Test Method	Results
Adhesion	ASTM D4541	350 psi, 100% Concrete Failure
Compressive Strength	ASTM D695	~9,000 psi
Flexural Strength	ASTM D790	~6,000 psi
Hardness	ASTM D2240	65-75
Tensile Strength	ASTM D638	~3,000 psi



ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® 33 EPOXY PRIMER/SEALER

PART A
PART A
PART B

B58AQ33
B58CQ33
B60VQ33

LIGHT GRAY
CLEAR
HARDENER

Revised: October 17, 2018

PRODUCT INFORMATION

8.20

RECOMMENDED SYSTEMS

Dry Film Thickness / ct.
Mils (Microns)

Concrete:

1 ct.	ArmorSeal 33 Epoxy Primer/Sealer	7.0-9.0 (175-225)
1 ct.	ArmorSeal 650 SL/RC	10.0 (250)

Concrete:

1 ct.	ArmorSeal 33 Epoxy Primer/Sealer	7.0-9.0 (175-225)
1 ct.	ArmorSeal 650 SL/RC	30.0 (750)

Concrete:

1 ct.	ArmorSeal 33 Epoxy Primer/Sealer	7.0-9.0 (175-225)
1-2 cts.	ArmorSeal 1000 HS Epoxy	3.0-5.0 (75-125)

Concrete:

1 ct.	ArmorSeal 33 Epoxy Primer/Sealer	7.0-9.0 (175-225)
1-2 cts.	ArmorSeal HS Polyurethane	2.0-3.0 (50-75)

ArmorQuartz System*:

1 ct.	ArmorSeal 33 Epoxy Primer/Sealer	10.0 (250)
	Clear, broadcast to excess with color quartz	
1 ct.	ArmorSeal 33 Epoxy Primer/Sealer	24.0 (600)
	Clear, broadcast to excess with color quartz	
1 ct.	ArmorSeal 650 SL/RC Clear at	16.0 (400)
1 ct.	ArmorSeal 650 SL/RC Clear at	8.0 (200)

*Refer to application procedures

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 Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Concrete & Masonry: SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3

Surface Preparation Standards

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

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature: 55°F (13°C) minimum, 95°F (35°C) maximum
(air, surface, and material)
At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:

1 gallon (3.78L) kit contains Part A and Part B
5 gallon (18.9L) mix Part A - 3.7 gal. (14.0L) in a 5 gal. (18.9L) container
Part B - 1.3 gallon (4.9L)

Weight: 10.6 ± 0.2 lb/gal ; 1.3 Kg/L, mixed

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® 33 EPOXY PRIMER/SEALER

PART A
PART A
PART B

B58AQ33
B58CQ33
B60VQ33

LIGHT GRAY
CLEAR
HARDENER

Revised: October 17, 2018

APPLICATION BULLETIN

8.20

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.

Concrete and Masonry

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, 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.

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. 310.2R Concrete Surface Preparation.

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.

APPLICATION CONDITIONS

Temperature: 55°F (13°C) minimum, 95°F (35°C) maximum
(air, surface, and material)
At least 5°F (2.8°C) above dew point

Relative humidity: 85% 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 Not recommended

Clean Up Reducer #54, R7K54

Squeegee
Squeegee..... Flat, rubber

Roller
Cover 3/8" woven with solvent resistant core

Refer to Application Procedures for specific directions.

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

Surface Preparation Standards

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



ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® 33 EPOXY PRIMER/SEALER

PART A
PART A
PART B

B58AQ33
B58CQ33
B60VQ33

LIGHT GRAY
CLEAR
HARDENER

Revised: October 17, 2018

APPLICATION BULLETIN

8.20

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Before mixing ArmorSeal 33 it is important that the surface is completely prepared and ready and that all tools and equipment are handy. To mix 1 gallon (3.78L) units: Use electric or air mixer (approximately 250 rpm) with metal mixing blade (Jiffy Model HS or equal). Pre-mix both components. Pour hardener contents into slack-filled resin can and mix for 2 to 3 minutes until material is thoroughly blended. To mix 5 gallon (18.9L) units: Use same procedure as 1 gallon (3.78L) units except a larger blade (Jiffy Model ES or equal) is required. Use low speed when mixing.

Immediately pour entire mixture onto the prepared substrate and spread material using a flat, rubber squeegee using sufficient pressure to work the primer into the porous surface. Immediately backroll the material with a quality 3/8" nap roller leaving 6-10 mils (150-250 microns) on the surface.

The fast set primer can be topcoated in 6 hours at 72°F (22°C). The primer must be tack free before topcoating. If pinholes or porosities are evident after initial cure of primer, repriming may be necessary, especially on very porous concrete.

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

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	7.0 (175)	9.0 (225)
Dry mils (microns)	7.0 (175)	9.0 (225)
~Coverage sq ft/gal (m ² /L)	180 (4.4)	230 (5.6)
Theoretical coverage sq ft/gal (m ² /L) @ 1 mil / 25 microns dft	1604 (39.4)	

NOTE: Apply by squeegee or roller only.

Drying Schedule @ 8.0 mils wet (200 microns):

@ 72°F/22°C

50% RH

To touch: 4-6 hours

To recoat:

minimum: 6 hours

maximum: 24 hours

To cure: 7 days

If maximum recoat time is exceeded, abrade surface before topcoating.

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

Pot Life: 30 minutes

Sweat-in-Time: None required

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

PERFORMANCE TIPS

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.

No reduction of material is recommended as it can affect film build, appearance, and adhesion.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

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.

ARMORQUARTZSYSTEMAPPLICATIONPROCEDURES

First Broadcast Step

1. Pre-mix ArmorSeal 33 Epoxy Primer/Sealer Clear components as previously referenced.
2. Pour hardener contents into a slack-filled resin can and mix with low speed drill for 3 minutes and until uniform.
3. Immediately pour the mixed material onto the substrate and pull out using a squeegee and cross roll with a 3/8" nap roller at a spread rate of 140-145 square feet per gallon (approximately 10.0 mils / 250 microns wft).
4. Allow material to self-level for 10-15 minutes. Begin evenly seeding the color quartz into the wet resin (much the same as grass seed is spread). Color quartz may be spread by hand or mechanical blower but should be broadcast in such a way that the granules fall lightly into the resin without causing the resin to move. Continue broadcasting to excess until the floor appears completely dry.
5. Allow to cure (cure times vary depending on environmental conditions) and sweep off excess granules with a clean, stiff-bristled broom. Clean granules can be saved for future use. All imperfections, such as high spots, should be smoothed before the application of the second broadcast.

Second Broadcast Step

1. Premix ArmorSeal 33 Epoxy Primer/Sealer Clear components as previously referenced.
2. Pour hardener contents into a slack-filled resin can and mix with low speed drill for 3 minutes and until uniform.
3. Immediately pour the mixed material onto the substrate and pull out using a squeegee and cross roll with a 3/8" nap roller at a spread rate of 65-70 square feet per gallon (approximately 24.0 mils / 600 microns wft).
4. Allow material to self-level for 10-15 minutes. Begin evenly seeding the color quartz into the wet resin (much the same as grass seed is spread). Color quartz may be spread by hand or mechanical blower but should be broadcast in such a way that the granules fall lightly into the resin without causing the resin to move. Continue broadcasting to excess until the floor appears completely dry.
5. Allow to cure (cure times vary depending on environmental conditions) and sweep off excess granules with a clean, stiff-bristled broom. Clean granules can be saved for future use.

NOTE: Color quartz distribution is critical to the success of the application. The finished appearance depends on the manner in which the granules have been applied. In grass seed-like fashion, allow the granules to fall after being thrown upward and out. Do not throw downward at a sharp angle using force.

Grout Coat / Seal Coat

1. Premix both components of ArmorSeal 650 SL/RC Clear separately, using a low speed drill and Jiffy mixer. Mix for 1-2 minutes and until uniform, exercising caution not to introduce air into the material.
2. Combine and mix with low speed drill and Jiffy mixer for 2-3 minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.
3. Apply ArmorSeal 650 SL/RC Clear using a flat trowel or squeegee and backroll with a 3/8" woven roller. Apply evenly at a spread rate of 100 square feet per gallon (approximately 16.0 mils / 400 microns wft), with no puddles, making sure of uniform coverage. Spike roll after 20-30 minutes as needed. Two coats may be required to duplicate desired texture. Take care not to puddle materials and insure even coverage.
4. Allow to cure. (Cure times vary depending on environmental conditions.)

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #54, R7K54. Clean tools immediately after use with Reducer #54, R7K54. Follow manufacturer's safety recommendations when using any solvent.

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.

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.