ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL® 650 SLN
SELF-LEVELING EPOXY

PART A	B58WQ595	SIGNAL WHITE - RAL 9003
PART B	B60VQ595	HARDENER
PART C	B58DQ550	HIGH BUILD FILLER

Revised Sept. 29, 2015

PRODUCT INFORMATION

8.25N

PRODUCT DESCRIPTION

ARMORSEAL 650 SLN self-leveling epoxy is a heavy duty concrete floor system that provides a high gloss, seamless, durable surface in nuclear facilities subject to radiation, decontamination and loss of coolant accident. This product meets specific design requirements for nuclear safety related qualification*. This product is quality manufactured to the requirements of 10 CFR 50 Appendix B and ANSI/ASME NQA-1.

- Chemical resistant
- Impact resistant
- Abrasion resistant
- Outstanding application properties

*DBA Qualification for LOCA is NRC license specific to the facility

PRODUCT CHARACTERISTICS

Finish:	Gloss
Color:	Signal White RAL 9003
Volume Solids:	100%, mixed
VOC (EPA Method):	<100 g/L; 0.83 lb/gal, mixed
Dry Film Density: (calculated)	> 100 lb/cu. ft. mixed
Mix Ratio:	3 component, premeasured

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**30.0** (750)	**50.0** (1250)
Dry mils (microns)	**30.0** (750)	**50.0** (1250)
~Coverage sq ft/gal (m^2/L)	**32** (0.79)	**53** (1.3)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**1600** (39)	

Drying Schedule @ 10.0 mils wet (250 microns):

	@ 55°F/13°C	@ 77°F/25°C *50% RH*	@ 95°F/35°C
To touch:	16-24 hours	6-12 hours	4-8 hours
To recoat:			
minimum:	36 hours	8 hours	6 hours
maximum:	72 hours	72 hours	72 hours
Foot traffic:	48 hours	24 hours	18 hours
Heavy traffic:	96 hours	72 hours	60 hours
To cure:	7 days	7 days	7 days
Pot Life:	60 minutes	40 minutes	20 minutes
Sweat-in-Time:	None	None	None

Shelf Life:	18 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

- Nuclear Power Plants
- Fabrication shops
- DOE Nuclear Fuel Facilities
- DOE Nuclear Weapons Facilities

SHIPPING WEIGHT

B58WQ595:	40.54 lbs (18.39 kg) per short-filled pail
B60VQ595:	16.68 lbs (7.57 kg) per short-filled pail
B58DQ550:	25 lbs (11.34 kg) per bag

PERFORMANCE CHARACTERISTICS

Test Name	System	Results
Abrasion Resistance ASTM D4060	Armorseal 650 SLN	103 mg loss
Adhesion* ASTM D7234	Macropoxy 646N / Armorseal 650 SLN / Macropoxy 646N	514 psi**
Chemical Resistance* ASTM 3912	Macropoxy 646N / Armorseal 650 SLN / Macropoxy 646N	No effect
Decontamination ASTM D4256	Armorseal 650 SLN	98%
Effects of Gamma Radiation ASTM D4082	Macropoxy 646N / Armorseal 650 SLN / Macropoxy 646N	Pass
Simulated DBA* ASTM D3911	Macropoxy 646N / Armorseal 650 SLN / Macropoxy 646N	Pass
Surface Burning ASTM E84 / NFPA 255	Macropoxy 646N / Armorseal 650 SLN / Macropoxy 646N	Flame Spread Index = 50; Smoke Development Index = 125

*Performed on concrete
**Concrete failure

continued on back

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APPLICATION EQUIPMENT

The following is a guide.

Reducer .....Not recommended

Clean Up .....Reducer #54, R7K54

Roller
Cover .....3/8" woven with solvent resistant core

Trowel .....Acceptable

Squeegee .....Acceptable

Spike Roller/
Loop Roller .....Required

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

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Concrete:			
1 ct.	Macropoxy 646N	2.0-4.0	(50-100)
1 ct.	ArmorSeal 650 SLN	30.0-50.0	(750-1250)
1 ct.	Macropoxy 646N	4.0-6.0	(100-150)

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. Always follow project specifications. Minimum surface prep is as follows:

Concrete Substrate:
ASTM D4258 Surface Cleaning Concrete
ASTM D4259 Abrading Concrete
SSPC-SP13 or ICRI No. 310.2 CSP 2-3 Surface Preparation of Concrete

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.

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

ORDERING INFORMATION

Packaging:

1 gallon (3.78L) kit*	contains Part A, Part B and Part C
5 gallon (18.9L) mix*	Part A - 3.33 gal. (12.6L) in a 5 gal. (18.9L) container Part B - 1.67 gal. (6.3L) in a 2 gal. (7.56L) container

*Must add 10 lbs of Part C High Build Filler per 1 gallon (3.78L) of mixed resin.

Weight: 10.4 ± 0.2 lb/gal ; 1.25 Kg/L, mixed (without the part C High Build Filler)

MIXING PROCEDURES

Surface preparation must be completed as indicated.

To mix 1 gallon (3.78L) units: Use electric or air mixer (approximately 250 rpm) with metal mixing blade (Jiffy Model HS or equal). Premix Part A and Part B components for 1-2 minutes, then pour hardener contents into slack-filled resin can. Mix for 2 to 3 minutes, moving blade around can while mixing. Avoid whipping in air while mixing. Slowly add Part C filler at 10 pounds per 1 gallon (3.78L) of mixed resin. Blend materials until no lumps remain and the filler is uniformly mixed with the resin. To mix 5 gallon (18.9L) units use same procedure as mixing 1 gallon (3.78L) units except a larger blade (Jiffy Model ES or equal) is required.

Immediately pour entire mixture onto prepared substrate and spread with a flat rubber squeegee to the desired thickness and "cross-roll" using a 3/8" nap soft woven roller or equivalent. Check film thickness frequently. After 20-30 minutes setup time, material should be rolled with a spiked roller to remove any entrapped air. Do not spike roll after 40 minutes.

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.

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.