ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL®1K
WATERBASED URETHANE FLOOR ENAMEL

B65W775	Extra White/Tint Base
B65T775	Clear Tint Base
B65A775	Haze Gray
B65C775	Clear

Revised: August 22, 2023

Product Information

8.49

Product Description

ARMORSEAL 1K Waterbased Urethane Floor Enamel is a gloss, high performance, one component polyester waterbased urethane, formulated specifically for industrial floor applications. Provides outstanding abrasion resistance, good chemical resistance, with excellent color and gloss retention.

- Fast dry
- Excellent color and gloss retention
- Chemical resistant
- Impact and abrasion resistant
- Performance comparable to two component WB urethane
- Resistant to "hot tire" pick-up
- May exhibit "tire tracking"
- Outstanding application properties

Product Characteristics

Finish:	Gloss
Color:	Wide range of colors possible.
Volume Solids:	29% ± 2%,(Clear) 34% ± 2%, (Colors) (May vary by color)
Weight Solids:	31.5% ± 2%, (Clear) 41% ± 2%, (Colors) (May vary by color)
VOC (EPA Method 24):	<340 g/L; 2.8 lbs/gal

Recommended Spreading Rate per coat:

	Clear Coat		Colors	
	Min.	**Max.**	**Min.**	**Max.**
Wet mils (microns)	**4.0** 100	**8.0** 200	**6.0** 150	**12.0** 300
Dry mils (microns)	**1.0** 25	**2.0** 50	**2.0** 50	**4.0** 100
~Coverage sq ft/gal (m^2/L)	**204** 5.0	**408** 10.0	**136** 3.3	**272** 6.6
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil/25 micron dft	**544** (13.3)			

Apply by brush or roller only.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 55°F/13°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1.5 hours	45 minutes	25 minutes
Foot traffic:	18 hours	8 hours	6 hours
Heavy traffic:	24 hours	18 hours	10 hours
To recoat (self):			
minimum:	8 hours	6 hours	3 hours
maximum:	30 days	30 days	30 days
To cure:	14 days	14 days	14 days

If maximum recoat time is exceeded, abrade surface before topcoating.
Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	24 months, unopened at 77°F (25°C) Store indoors at 40°F (4.5°C) to 100°F (38°C)
Flash Point:	>200°F (93°C), Seta Flash, mixed
Reducer/Clean Up:	Water

Recommended Uses

For use over prepared concrete floors or previously painted floor surfaces in sound condition.

- Manufacturing plants
- Laboratories
- Schools
- Hospitals
- Aircraft hangers
- Interior high maintenance areas
- Exterior floors-helipads
- Suitable for use in USDA inspected facilities
- Meets ADA requirements for slip resistance for floors
- Acceptable for use in Canadian Food Processing facilities, categories: D2 (Confirm acceptance of specific part numbers/rexes with your SW Sales Representative)

Performance Characteristics

Substrate*: Concrete

Surface Preparation*: Clean, dry, sound

System Tested*:

1 ct. ArmorSeal Floor Plex 7100 Primer @ 2.0 mils (50 microns) dft
1 ct. ArmorSeal 1K WB Urethane Floor Enamel @ 3.0 mils (75 microns) dft
*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS10 wheel, 1000 cycles, 1 kg load	145 mg loss
Adhesion	ASTM D4541	350 psi, 100% Concrete Failure
Direct Impact Resistance (topcoat only)	ASTM D2794	160 in. lb.
Dry Heat Resistance (topcoat only)	ASTM D2485	150°F (66°C), intermittent 250°F (121°C)
Flexibility	ASTM D522, 180° bend, 1/4" mandrel	Passes
Hot Tire Pick-up	ITM @ 140°F (60°C)	Passes
Pencil Hardness (topcoat only)	ASTM D3363	2H
Reverse Impact Resistance (topcoat only)	ASTM D2794	100 in. lb.
Slip Resistance, Floors	ASTM C1028**, 0.60 minimum Static Coefficient of Friction	Pass dry with and without SharkGrip Additive; Pass wet with SharkGrip Additive

**Test method withdrawn in 2014 without replacement

Resists splash, spillage, and fumes of dilute acids, alkalies, solvents, and fuels

continued on back

ArmorSeal Heavy Duty Floor Coatings

ARMORSEAL®1K
WATERBASED URETHANE FLOOR ENAMEL

B65W775	Extra White/Tint Base
B65T775	Clear Tint Base
B65A775	Haze Gray
B65C775	Clear

Revised: August 22, 2023

Product Information

8.49

Recommended Systems

		Dry Film Thickness / ct. Mils	(Microns)
Concrete floors, unpainted:			
1 ct.	ArmorSeal 8100 (reduced with one pint of water per gallon)	2.0-4.0	(50-100)
1-2 cts.	ArmorSeal 1K WB Urethane Floor Enamel	2.0-4.0	(50-100)
Concrete floors, unpainted: Clear Only (B65C775)			
1 ct.	ArmorSeal 1K Urethane Clear, Reduced 10% by volume with water (minimum)	2.0	(50)
2 cts.	ArmorSeal 1K Urethane Clear (minimum)	2.0	(50)
Note: Three Coat System is required			
Concrete floors, previously painted:			
1-2 cts.	ArmorSeal 1K WB Urethane Floor Enamel	2.0-4.0	(50-100)
Painted Surfaces in Sound Condition:			
1-2 cts.	ArmorSeal 1K WB Urethane Floor Enamel	2.0-4.0	(50-100)

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: SSPC13/NACE 6 **(or)** ICRI No. 310.2R, CSP 1-2

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

Tint with CCE colorants at 100% strength. Do not use BAC.

Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

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:	85% maximum

Refer to product Application Bulletin for detailed application information.

Ordering Information

Packaging:	1 gallon (3.78L) and 5 gallon (18.9L) containers
Weight:	8.7 ± 0.2 lb/gal ; 1.04 Kg/L (Clear) 9.7 ± 0.2 lb/gal ; 1.16 Kg/L (White, Haze Gray), may vary by color

Safety Precautions

Refer to the SDS 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®1K
WATERBASED URETHANE FLOOR ENAMEL

ArmorSeal Heavy Duty Floor Coatings

B65W775	Extra White/Tint Base
B65T775	Clear Tint Base
B65A775	Haze Gray
B65C775	Clear

Revised: August 22, 2023

Application Bulletin

8.49

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. 310.2R, CSP 1-2. 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. 310.2R 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, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. 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

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:	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/Clean Up ..... Water

Brush
Brush.....Nylon/Polyester
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®1K
WATERBASED URETHANE FLOOR ENAMEL

B65W775	Extra White/Tint Base
B65T775	Clear Tint Base
B65A775	Haze Gray
B65C775	Clear

Revised: August 22, 2023

Application Bulletin

8.49

Application Procedures

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly with low speed power agitation prior to use. Avoid vigorous agitation. Make certain no pigment remains on bottom of can.

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

Recommended Spreading Rate per coat:

	Clear Coat		Colors	
	Min.	Max.	Min.	Max.
Wet mils (microns)	**4.0** 100	**8.0** 200	**6.0** 150	**12.0** 300
Dry mils (microns)	**1.0** 25	**2.0** 50	**2.0** 50	**4.0** 100
~Coverage sq ft/gal (m^2/L)	**204** 5.0	**408** 10.0	**136** 3.3	**272** 6.6
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil/25 micron dft	**544** (13.3)			

Apply by brush or roller only.

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 55°F/13°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	1.5 hours	45 minutes	25 minutes
Foot traffic:	18 hours	8 hours	6 hours
Heavy traffic:	24 hours	18 hours	10 hours
To recoat (self):			
minimum:	8 hours	6 hours	3 hours
maximum:	30 days	30 days	30 days
To cure:	14 days	14 days	14 days

If maximum recoat time is exceeded, abrade surface before topcoating.
Drying time is temperature, humidity, and film thickness dependent.

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. After cleaning, flush spray equipment with mineral spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using mineral spirits.

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.

When using as a clear system (B65C775), please refer to the product data page: Recommended Systems. Three coats are required.

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

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

Always test adhesion by applying a test patch of 2-3 square feet.

Allow to dry one week before checking adhesion.

Do not use hydrocarbon solvent for cleaning.

Anti-slip additives, such as H&C SharkGrip®, may be added to the coating to provide some slip resistance. This product should not be used in place of a non-skid finish.

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

Safety Precautions

Refer to the SDS 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.