5400 WATERBORNE CRU



VERSATILEHIGH-PERFORMANCE COATINGS

PRODUCT DESCRIPTION:

5400 Waterborne Chemical-Resistant Urethane (CRU) Clear exhibits excellent wear and UV stability when installed over concrete floors in garages or commercial areas. This product is breathable, allowing moisture vapor emission (MVE) to pass through, which helps prevent issues related to moisture buildup beneath the coating. It provides film build, gloss, and chemical resistance comparable to solvent-based systems without intense odor or high VOC levels. This allows for application during normal business hours without disturbing customers or neighboring tenants. The 5400 Waterborne CRU is available in both gloss and matte finishes, making it a versatile urethane topcoat option for decorative concrete applications. It ensures

APPLICATIONS:

Residential Floors

high performance and ease of use.

- Commercial Floors
- Industrial Floors
- Exterior Applications

ADVANTAGES:

- Low Odor
- Very Low VOC
- Outstanding Chemical Resistance
- High-Gloss
- Long Pot Life & Working Time
- SCAQMD Complaint

LIMITATIONS:

- Must be applied under 10 Mils or hazing may occur
- Will not bridge cracking
- Matte version cannot go direct to concrete and requires a primer

CLEAR

PACKAGING:	
1.5 Gallon Kit	15 Gallon Kit

COVERAGE RATES:			
OVER CONCRETE SUBSTRATE			
1 ST COAT	300 ا	FT ² / GAL @ 5.3 MIL:	S WET FILM
2 ND COAT	350 FT ² / GAL @ 4.6 MILS WET FILM		
OVER FLAKE SYSTEM			
1/4" FLAKE		1/8" FLAKE	1/16" FLAKE
250 FT ² / GAL		200 FT ² / GAL	150 FT ² / GAL

TECHNICAL PROPERTIES:			
VOLUMETRIC MIX RATIO		2A:1B	
		GLOSS	MATTE
VOLUMETRIC SOLIDS		61%	64%
VOC		45 g/L	47 g/L
POTLIFE (1.5 GAL MASS)		70 ± Mins @ 75°F	
WORKING TIME		40 Mins @ 75°F	
DRY TO TOUCH		8-10 Hours @ 75°F	
RECOAT WINDOW		10-24 Hours	
FULL CURE		5-7 Days	
PENCIL HARDNESS		ASTM	H-2H
		D3363	
ABRASION RESISTANCE		ASTM D4060	3 mg Lost
ADHESION		ACI 503R	350 PSI
FLAMMABILITY		SELF-EXTINGUISHING	
CHEMICAL RESISTANCE:			
ACETONE	NO EFFECT		
XYLENE	NO EFFECT		
10% HCL	NO EFFECT		
AMMONIA	N	NO EFFECT	
DEGREASER	F	FAINT SPOTTING	
LIQUID PLUMBER	NO EFFECT		
VINEGAR	NO EFFECT		
CLOROX	NO EFFECT		
WINDEX	NO EFFECT		
MOTOR OIL	N	NO EFFECT	
GASOLINE		NO EFFECT	
SKYDROL		NO EFFECT	
HOT TIRE	NO EFFECT		

STORAGE:

Store materials indoors between 50°F & 75°F

SHELF LIFE:

One year from the date of manufacture

APPLICATION EQUIPMENT:	
Protective Clothing	18" Roller Frame
	SKU - 7012
Jiffy Mixing Paddle	18"x3/8" Nap Roller Cover
SKU – 7050	SKU – 7006-1
	8-12 mil Notched
Slow Speed Drill	Squeegee
	SKU – 7090-K
Spike Shoes	Magic Trowel
SKU – 7045-D	SKU – 7071-22

5400 WATERBORNE CRU

Technical Install Guide

VERSATILE HIGH-PERFORMANCE COATINGS

SUBSTRATE REQUIREMENTS:	
	Concrete must be structurally sound
CONCRETE:	and free of all dirt, debris, and
	contaminants.
	Concrete shall be porous and have a
PROFILE:	Concrete Surface Profile (CSP) level
	between 2 & 4
	The substrate shall have a Moisture
MOISTURE:	Vapor Emission Rate (MVER) of 3lbs /
	1000 ft ² / 24 hr. or less.
	Ambient and substrate temps must
TEMPERATURE:	be above 35°F and Relative Humidity
	should not exceed 65%

SURFACE PREPARATION: Perform Moisture Test using Calcium Chloride concrete moisture test kit per ASTM F1869 1 test/1000 ft2 is recommended. Patch all depressions, divots, and cracks using 4900 5-minute Crack Weld, 4930 Polyurea Crack & Spall Filler, or Divot Patch to reduce the ability to see the defect through the epoxy coating. Concrete should be mechanically profiled and prepared to produce a Concrete Surface Profile (CSP) level between #2 & #4 according to the (ICRI) Guideline No. 03732.

PLEASE REVIEW SAFETY DATA SHEETS (SDS) & CHEMICAL SAFETY GUIDE FOR SAFETY AND PRECAUTIONS

ENVIRONMENTAL FACTORS:

Working times are affected by environmental conditions. Large masses of mixed and heated material will have a shorter pot life.

Keep material core temperatures between 50-75°F. In elevated temperatures, consider icing buckets to reduce product temperatures, and in cold climates, use pail warmers.

5400 MIXING STEPS: Pour pre-mixed A-Component and B-Component into a clean 5-gallon bucket (If mixing bulk kit, be sure to follow the specified 1A:1B ratio) Mix A & B Components using a drill at a slow speed for 2 minutes. Transfer mix to new mixing vessel Continue to mix for an additional 30 seconds to ensure components are thoroughly blended.

5400 APPLICATION STEPS:

COVERAGE RATES OVER CONCRETE SUBSTRATE:

150 FT² / GAL @ 10.7 MILS WET FILM 2ND COAT 175 FT² / GAL @ 9.1 MILS WET FILM

OVER FLAKE SYSTEM

1/4" FLAKE	1/8" FLAKE	1/16" FLAKE
150 FT ² / GAL	140 FT ² / GAL	125 FT ² / GAL

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APPROXIMATE WORKING TIMES: 40 MINS @ 75°F



Pour a band of mixed material onto the floor roughly 6-8" wide.



Begin spreading with an 8-12 mil notched squeegee or Magic Trowel. Work material evenly, keeping a wet edge.



Perform a Single Backroll on the surface by walking into the wet material, wearing spike shoes, and rolling perpendicular to your first application direction.



Allow the system to dry typically 3-6 hours at 75°F Slow-Dry (SD) Version is dry 5-8 hours at 75°F

CLEAN-UP:

Immediately clean up splatter marks and tools with MEK or Acetone. Clean hands and exposed skin with mild soap and water and citrus-based hand cleaners.

MAINTENANCE:

Maintain 5400 to a minimum of 4 mils dry film.

DISCLAIMER:

All information provided in this technical data sheet is based on laboratory data. It is the responsibility of the customer to test the material for their application and conditions prior to using the product.

TEMPERATURE:

The product was tested at ambient temperature (75°F -77°F). Results WILL vary when the product is used at temperatures different from the testing temperature. The pot life, gel time, and cure time are generally longer for colder-temperature applications and shorter for higher-temperature applications. Physical properties are also impacted and dependent upon temperature.

SLIP RESISTANCE:

OSHA and the American Disabilities Act (ADA) have set enforceable standards for slip resistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. Versatile High-Performance Coatings recommends using angular slip-resistant aggregate in all coatings or flooring systems exposed to wet, oily, or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards. Versatile High-Performance Coatings or its sales agents will not be responsible for injury incurred in a slip-and-fall accident.

WARRANTY:

Versatile High-Performance Coatings guarantees that this product is free from manufacturing defects and complies with our published specifications. If the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. Versatile High-Performance Coatings (herein referred to as "seller") makes no warranty, expressed or implied, regarding the use of its products. Since use of this product is beyond the seller's control, the buyer assumes all risk of use. Seller's obligation shall be to replace material if found defective. Seller shall not be liable for any damage, injury, loss, direct or consequential, resulting from the use of its products. End user must determine if substrate is suitable for coating application before installing.

TECHNICAL SERVICES:

Technical services can be obtained by contacting Versatile High-Performance Coatings directly at 214-807-6878.