Product Information

U.S. Resin Supply & Manufacturing - SB65

Two-Component Chemical Resistant High Wear Urethane

U.S.RESIN SUPPLY & MANUFACTURING

Description

U.S. Resin Supply & Manufacturing SB65 is a two component, high solids, solvent based, aliphatic polyester polyurethane. The UV resistant, mar resistant, and chemical resistant nature of this product will cause it to outperform most other types of sealers or topcoats when compared. With an incredibly low VOC < 50 g/l, U.S. Resin Supply's SB65 can be used as a floor coating in any region of the United States.

Uses

SB65 is designed for professional use only and is specified as the finish coat for use in moderate to strong chemical environments or in heavy traffic areas. Apply SB65 as a coating over U.S. Resin Supply & Manufacturing 100% solids epoxy floor coatings for an extra durable topcoat. SB65 can also be used as a sealer on a variety of other surfaces such as waterproofing concrete or masonry, faux finish coating systems, decorative residential concrete floors, or industrial maintenance facilities. Use SB65 as a coating on industrial floors, commercial or residential garage floors, restaurant floors, food processing facilities, automotive service areas, or virtually anywhere a strong topcoat is required.

Advantages

- **SCAQMD VOC Compliant (VOC < 50 g/l)**
- **Excellent Chemical & Abrasion Resistance**
- **1:2 (by volume) Mix Ratio**
- **High Gloss or Satin Finish**
- **Color and Gloss Retention**
- **Aliphatic Polyester Polyurethane**
- **Walk on 18 Hours, Drive on 72 Hours**



Coverage

300-350 ft² per gal as a coating
350-400 ft² per gal as a sealer

Packaging

1.5 gal kits pre measured with ½ gallon of Isocyanate A and 1 gallon of resin B in 1-gallon metal cans 15-gal kits pre measured in three 5-gallon pails

Options

SB65: Clear, Gloss Finish 9520P:Pigmented,Gloss Finish in all USRS standard colors, white, & black

9520S: Satin Finish: Clear only

Inspection

Concrete must be clean, dry, and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be at least 2500 psi and feel like 30-grit sandpaper. The concrete should be porous and be able to absorb water. A minimum of 28 days cured is required on all concrete. Relative humidity in the concrete floor slab should be below 80% (per ASTM F-2170). All moisture should be kept away a min. of 72 hrs before application and a min. of 72 hours after installation. This includes sprinklers, rain, fog, dew, etc.

Before starting flooring work, test existing concrete slab to make sure there is no efflorescence or high levels of alkalinity. Alkalinity refers to a high pH reading which means the floor is not neutral. A high alkaline environment can cause salts to creep up through the cement called efflorescence. These salts have a tendency to prevent or destroy the bonding of coatings to the concrete. The most common form of testing is the use of a wide-range pH paper or tape. Make sure the floor's pH reading ranges between 5-9 to ensure adhesion. Testing of concrete for alkalinity can show the amount of alkalinity only at the time the test is run, and cannot be used to predict long-term conditions. Calcium chloride tests should be conducted to determine if the concrete is sufficiently dry for a floor coating's installation. The calcium chloride tests should be conducted in accordance with the latest edition of ASTM F 1869, *Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous*

***Calcium Chloride*. When running a calcium chloride test, it is important to remove any grease, oil, curing agents, etc. so accurate readings can be obtained. A rate of 3 lbs/1000 ft²/24hr period or less is an acceptable amount of vapor pressure for the SB65. If the reading is any higher, please consult your USRS sales team for further instructions. Failing to adhere to these strict guidelines can result in product delamination, discoloration, blistering, or all together failure of the coating system. Testing is the responsibility of the applicator. USRS bears no responsibility for failures due to any of the above conditions.**

Surface Preparation

Over Concrete:

SB65: Concrete should be mechanically profiled by shot blasting or diamond grinding. When using other methods of scarification, make sure it is roughed to feel like 30 grit sandpaper and so that it is porous and contaminant free so the product can soak in and properly bond.

SB65 Satin: Do not apply SB65 Satin directly over concrete or overlays without first sealing the surface. The flattening agents in SB65 Satin are a powder and can leave a hard white substance if it is allowed to penetrate too deep into a porous substrate.

Over Epoxy or CRU: Apply directly over new epoxy or urethane within 24 hours of initial application. When applying over existing epoxy or CRU that has been cured for longer than 24 hours, sand the surface with 100 grit sandpaper, remove debris and wipe with acetone just before new application.

Priming

For indoor use, substrates can be primed by using U.S. Resin Supply & Manufacturing epoxy floor coatings. Primer coat should be troweled smooth and backrolled at 200-250 sq ft per gallon to help avoid pinholes. Apply 1 or 2 coats of primer to achieve the proper build. Read individual product information sheets. If applying outdoors, use SB65 as a sealer coat first over the substrate by cutting with up to 25% acetone. Apply very thin.

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Mixing

Before application, SB65 resin side B should be premixed in its individual container. Add 1 part of the A-side to 2 parts of the B-side by volume while mixing, using a mechanical mixer (with Helix or Jiffy attachment) at low to medium speeds. Material can be cut back with up to 25% acetone for use as sealer or 10% acetone for use as a coating. For a better build, it is best to not cut back the CRU with any solvent. Mix until a homogeneous mixture and streak-free appearance is attained (2-3 minutes) and frequently stir to keep uniform color during application. Use care to scrape the sides of the container to ensure that no unmixed material remains.

Application

For best results, the material should be applied by squeegee and back-rolled. Neatly cut-in all edges with a trowel or brush. Squeegee the material to spread evenly throughout the section and backroll using a 1/4" solvent proof, non-shedding nap roller for smooth surfaces and a 3/8" nap for rough surfaces. Be sure to use light pressure with the roller and spread evenly in a "V" pattern, rolling in both directions. Roll the product as thin as possible. Avoid over-rolling as this may cause unwanted bubbles or roller marks. Avoid puddling, as material will turn white and bubble. Brush all puddles and expansion joints to avoid this problem. Keep all moisture away for the first 48 hours (i.e. sprinklers).

Drying Time

Dry to touch in 6-7 hours. Recoat when tack free, but prior to 24 hours to avoid delamination. If 24 hrs is exceeded, lightly sand the surface to de-gloss it, and wipe clean with acetone prior to recoating. Light foot traffic may be permitted after 24 hours. Allow 72 hours for vehicle traffic and before placing heavy objects on the surface.

Maintenance:

Cleaning the cured CRU is best done by mopping the surface with mild soap & water or a mild detergent. For best appearance, USRS recommends resealing the surface every 3-5 years. Reseal by sanding existing coating to completely de-gloss, cleaning surface by wiping with acetone, and applying CRU over dry surface using above application specifications

Limitations

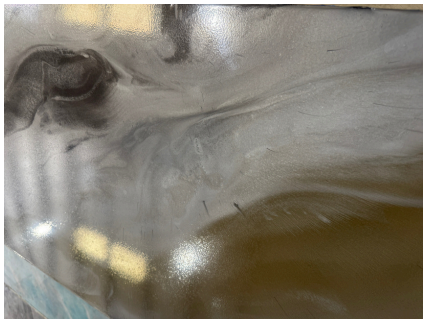
- **Do not apply in temperatures below 50°F or above 90°F.**
- **Do not apply unless the temperature is 5° above the dew point or if rain is expected within 24 hours.**
- **Do not apply on a damp or moist surface as it will bubble, foam, or whiten and may cause delamination.**
- **Do not allow any USRS products to freeze.**
- **Always apply to a test area before starting the job.**
- **Prior to coating previously sealed surfaces, do a small area to test for adhesion.**
- **Shelf Life of this material is 12 months from the date of manufacture. (See batch number for manufactured date)**
- **USRS recommends the use of angular slip resistant aggregate in all coatings or flooring systems that may be 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.**
- **OK for use as a Floor Coating, Industrial Maintenance Coating, Concrete Masonry Sealer, or Faux Finish Coating in the South Coast Air Quality Management District (SCAQMD).**
- **OK for use in residential garages in all districts of the United States *including* SCAQMD, CARB, and OTC**
- **Please become familiar with local Air Quality laws and regulations prior to applying this coating. USRS bears no responsibility for improper usage.**

Clean Up

Uncured material can be removed with a solvent. Cured material can only be removed mechanically. All empty containers must be disposed of according to local, state, and federal regulations.

Warranty

U.S. Resin Supply & Manufacturing guarantees that this product is free from manufacturing defects and complies with our published specifications. In the event that 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. USRS makes no other warranty, expressed or implied, and all warranties of merchantability and fitness for a particular purpose are hereby disclaimed. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product. Manufacturer shall not be liable for material used outside of its shelf life. For product dating, please refer to the batch number on the product or contact U.S. Resin Supply & Manufacturing.



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Technical Data

	Test Method	Results	
Shelf Life		12 months	
Mixing Ratio by Volume A:B		1:2	
Dry Film Thickness per Coat:	ASTM D-3363	3-5 mils	
Tear Resistance DleC	ASTM D-1004-66	270 pli	
Tensile Strength	ASTM D-412	3980 psi	
Ultimate Elongation	ASTM D-412	6%	
Gloss (60 deg)	ASTM D-823	90%	
Volume Solids	ASTM D-2697	56% by volume Clear 62% by volume Pigmented	
VOC	ASTM D 2369-81	< 50 g/l	
Pot Life (75±3oF)		60 minutes	
Recoat Time		7 hrs (min) -24 hrs (max)	
Taber Abrasion	ASTM D-4060-84	42.7 mg Loss, C17 Wheel, 1000g Load, 1000 Cycles	
Impact Resistance	ASTM D-2794-84	Inch-pounds Direct 160 Reverse 160	
Pencil Hardness	ASTM D-3363-84	3-H	
Viscosity at 75 F(24 C) 50% RH		A-SIDE	190 cps
		B-SIDE	1150 cps
Weight		A-SIDE	9.5 lbs/gal
		B-SIDE	9.6 lbs/gal clear 10.8 lbs/gal pigmented
Flash Point		A-SIDE	<100 F
		B-SIDE	<100 F
MEK Resistance		No effect after 100 rubs	
Chemical and Solvent Resistance (4 Hour Spot Test, Covered)			
Skydrol B-4		No Effect	
Hydraulic Fluid #83282		No Effect	
25% Nitric Acid		Blistered	
50% Caustic		No Effect	
37% Hydrochloric Acid		Lifted Film	
50% Sulfuric Acid		Stain	
50% Sodium Hydroxide		No Effect	
10% Acetic Acid		No Effect	
MEK		Slight Swelling	
Xylene		No Effect	
PCBTF		No Effect	
40 Day Test Covered			
Skydrol B-4		No Effect	
Hydraulic Fluid #83282		No Effect	

