# 5K-P100 VOC

## **DESCRIPTION:**

SK-P100 VOC is a two component, high solids aliphatic polyurethane formulated to comply with California VOC regulations. This product offers a remarkable combination of performance properties not found in other polymer coatings. SK-P100 VOC produces protective films which are hard, flexible and very impact resistant. These coatings feature high abrasion and scratch resistance, exterior durability, easy soil release and excellent resistance to a broad range of chemicals. For exterior applications, a UV stabilizer package is incorporated to ensure long term chalk resistance and gloss retention. A special accelerator is available when rapid project turnaround is required.

SK-P100 VOC has been designed as a high performance top coat in various protective coating and seamless flooring applications. It provides maximum cleanability and stain resistance when used as a finish coat in color chip flooring or epoxy-quartz flooring. This coating is ideally suited for clean-room floors, automotive repair facilities, aircraft hangars and other high wear areas requiring resistance to fuels and chemicals. When used as a finish coat in wall coating systems, anti-graffiti properties are greatly enhanced.

# **USES:**

- Interior/Exterior Applications
- High Performance Finish Coat
- High Wear Areas Requiring Chemical Resistance
- Areas where low VOC is required

#### CHEMICAL COMPOSITION:

Polyester polyol crosslinked with aliphatic polyisocyanate.

# **COLORS:**

Available in 16 standard colors, plus clear.



# MOISTURE VAPOR EMISSIONS PRECAUTIONS:

All concrete floors not poured over an effective moisture vapor retarder are subject to possible moisture vapor transmission that may lead to blistering and failure of the coating system. It is the coating applicator's responsibility to conduct calcium chloride testing in compliance with ASTM F1869, or relative humidity probe testing in compliance with ASTM-F2170, to determine if excessive levels of vapor emissions are present before applying any coatings. Arizona Polymer Flooring offers S-1300 Pene-Krete® for cementitious overlay products and VaporSolve® Moisture Remediation systems for resinous floor coatings. Consult our technical service department. Arizona Polymer Flooring and its sales agents will not be responsible for coating failures due to undetected moisture vapor emissions.

# SURFACE PREPARATION:

SK-P100 VOC is intended to be applied over primed or previously coated surfaces. Do not apply directly to concrete. Surface must be absolutely clean, dry and free from all dirt, wax, oil, chalk, incompatible paint or detergent film. Fully cured, previously coated surfaces must be cleaned and sanded lightly with 80-100 grit sandpaper or otherwise mechanically abraded before recoating. If multiple coats of SK-P100 VOC are applied, apply additional coats as soon as possible. If more than 24 hours has elapsed or the coating cannot be indented with a fingernail, lightly sand surface to ensure inter-coat adhesion, or apply a thin coat of SK-P250 as a tie coat.



# **5K-P100 VOC**

#### MIXING:

Mix only that amount of material that can be used in a 2-3 hour period. In very hot weather it is advisable to mix smaller batches to ensure good flow and workability. Because color change can occur as mixed material advances into its pot life, when using as a pigmented finish coat, mix only that amount of material than can be used in 1 hour. Premix Part A before blending with Part B. Combining ratio is 4 Parts A to 1 Part B. Proportion the amounts carefully and mix for 2 full minutes using a low speed drill, scraping the bottom and sides of the mixing vessel. 15-20% water must be added to achieve a low application viscosity. A common mixing ratio is 4A:1B:1water.

#### APPLICATION RECOMMENDATIONS & COVERAGE:

SK-P100 VOC may be applied by brush, roller or airless sprayer. Apply at 275-350 sq. ft. per gallon with 3/8" or 1/2" nap roller as a finish coat over primed concrete. May be applied up to 200 sq. ft. per gallon as a fill coat in aggregate-filled flooring systems using a rubber squeegee and back rolling with a 3/8" nap roller. If using the satin version of this material, it is very important to achieve a uniform application rate of 300-350 sq. ft. per gallon. Heavier films will be glossier, thinner applications will be flatter.

## SHELF LIFE:

SK-P100 VOC has a shelf life of 1 year when properly stored in an unopened container. Material should be stored at 55°-90° and no greater than 50% humidity. Ensure all lids are tightly sealed to ensure the longest lasting shelf-life.

## **PRECAUTIONS:**

- Handling Precautions: Material is combustible. Extinguish all flames, pilot lights and electric motors until all vapors are
  gone and the coating is hard. The vapor is harmful. Use only with adequate ventilation/or appropriate cartridge-type
  respirator. Avoid contact with skin; wear protective gloves. Read Safety Data Sheet before using.
- Slip and Fall Precautions: OSHA and the American Disabilities Act (ADA) have now 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. Arizona Polymer Flooring 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. Arizona Polymer Flooring or its sales agents will not be responsible for injury incurred in a slip and fall accident.





# **TECHNICAL INFORMATION:**

Physical Properties	
Mixing Ratio, by Volume	2-1
Solids Content, by Weight (Pigmented)	62%
Solids Content, by Volume (Pigmented)	59%
Solids Content, by Weight (Clear)	60%
Solids Content, by Volume (Clear)	54%
VOC	100 grams/liter
Viscosity, cps (77 degrees)	500 average
Pot Life (77 degrees, 1 quart mass)	2 hours
Pot Life (95 degrees, 1 quart mass)	1 hour
*Pot life is reduced by increasing mass and/or temperature.	

Cure Times (77 degrees)	
Dry to Touch	4-6 hours
Recoat	10-12 hours
Light Traffic	24 hours
Full Cure	7 days

<sup>\*</sup>Higher temperatures will shorten cure time and lower temperatures will lengthen cure time.

Performance Properties	
Gloss (60 degrees)	90-95
Gloss (satin material, 60 degrees)	50-60
Hardness (Konig)	122
Tabor Abrasion (1000 gm. Load 1000 cycles, CS 17 wheel)	38 mg. loss
Flexibility (ASTM D 222)	Passes 1/8 inch
Impact Resistance (ASTM D 2794)	Passes 120 inch-pound direct and reverse

# CHEMICAL AND STAIN RESISTANCE (ASTM D-1308 24 HOURS IMMERSION):

Urine	No effect
Blood	No effect
Whiskey	No effect
Black Ink	No effect
Brake Fluid	No effect
Gasoline	No effect
Skydrol B-4	No effect
Hydraulic Fluid #83282	No effect
Mineral Spirits	No effect
Xylene	No effect
MEK	Film softened
50% Sodium Hydroxide	No effect
25% Hydrochloric Acid	No effect
25% Sulfuric Acid	No effect
25% Acetic Acid	No effect
25% Nitric Acid	Film blistered



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## LIMITATIONS:

- Do not use on unprimed substrate.
- Use of satin material requires the addition of accelerator during mixing.
- Pigmented version not available in Satin.

## **WARRANTY:**

Arizona Polymer Flooring 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. ARIZONA POLYMER FLOORING MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. Arizona Polymer Flooring shall not be liable for damages caused by application of its products over concrete with excessive moisture vapor transmission or alkalinity. Arizona Polymer Flooring shall not be liable for any injury incurred in a slip and fall accident. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product.

