

## Stellmann Aqualine PU PRO

P3, P4, P5 and R9 R10, R11 / R12

Water-based, dual-component non-slip coating.

UV-resistant, for interior and exterior applications



### Description

Stellmann Aqualine PU PRO is a coloured concrete floor coating system for interior and exterior areas. It is a premium quality dual-component PU coating and offers outstanding mechanical and chemical resistance and is UV-resistant. Both components are low odor and VOC-free. The system is water soluble and can be used on floors off mineral substrates such as industrial halls, factories, stairs, cellars, commercial kitchens, passageways, corridors, garages parking lots, etc. It can also be used on concrete walls (interior and exterior). Stellmann Aqualine PU PRO can be applied with a P3, P4 and P5 slip-rating.

### Features

- Premium quality, dual-component polyurethane coating
- Water based, low odor and VOC-free
- Easy to apply with long pot life
- Semi-gloss finish
- Designed to be applied with Stellmann Non-Slip Particles for excellent slip-resistance in various setting and requirements
- UV-resistant, non-yellowing (does not change colour like epoxies)
- Non-toxic
- Can also be used on other surface materials such as tiles in combination with Stellmann Clear Primer

### Benefits

- Apply by roller or airless sprayer
- No primer required on concrete
- Dilutable with water. No thinners required
- For interior and exterior applications
- Makes surfaces compliant conform AS 4586 and AS 4663
- Non-flammable / non-hazardous
- Apply two coats: First coat - which is diluted with water - acts as primer, second coat is finish coat. Third coat might be required, depending on surface porosity and application method.

### Precautions And Limitations

Read Data Sheet, Material Safety Data Sheet, and any precautionary labels on containers. Do not apply in exterior situations when rain threatens. Do not apply when relative humidity is above 80% or is likely to go above 80% shortly after the application has been completed.

Practical spreading rates will vary depending on such factors as method and conditions of applications and surface roughness and porosity.

Suitable for application over concrete substrates. For any other substrate, contact customer service or [info@stellmann.com.au](mailto:info@stellmann.com.au)

Performance Guide			
Weather	Excellent resistance to exterior exposure	Salt	Unaffected by splash and spillage of neutral salt solutions.
Heat Resistance	Up to 120°C dry heat	Water	Resists rain and condensation. Not recommended for permanently immersed exposure.
Solvent	Unaffected by splash and spillage of alcohols and similar solvents	Abrasion	For low, medium and high traffic
Acid	Not recommended where splash or spillage may occur.	Alkali	Not recommended where splash or spillage may occur.

Typical Properties			
Gloss Level	Semi-gloss	Thinner	Water. See dilution instructions
Standard Colours	Light Grey: RAL 7035 Traffic Grey: RAL 7042 Anthracite Grey: RAL 7016  Traffic Yellow: RAL 1023 Traffic White: RAL 9016  Other colours available upon request	Mix Ratio	5 : 1 (weight)  Part A = 5 and Part B = 1
Components	2	Pot life	Circa 4 hours at 20°C  Only mix as much as immediately required
Toxicity	No adverse health effects expected if the product is handled in accordance with the directions on the Safety Data Sheet	V.O.C. Level	5 g/L
Shelf Life	1 year in an unopened can. Protect from frost and store in a cool dark place without direct sunlight exposure		
Touch Dry	60 min		
Clean up	Water		
Application Method	Roller, conventional and airless sprayer  Contact Stellmann for spray application instructions		
Application Conditions	Air Temp. Substrate Temp. Relative Humidity Concrete Moisture	Min. 15°C 15°C	Max. 35°C 35°C 75% <10%

Application Guide	
Surface Preparation	<p>New concrete must cure for a minimum of 28 days before applying Stellmann Aqualine PU PRO. Ensure surface is thoroughly dry before application (&lt; 3% building material moisture). The surface must be structurally sound, and the substrate compressive strength should be at least 25MPa. The substrate tensile strength should be at least 1.5N/mm<sup>2</sup>. All non-structural cracks and holes need to be repaired.</p> <p>In general, the surface to be treated needs be clean and free of all traces of loose material, dirt, debris, oil, grease, old coatings, curing compounds, release agents, laitance, dust and other contaminants.</p>

	<p>All new or old concrete surfaces should be prepared by mechanical grinding, abrasive blasting, etching, or any other suitable preparation/cleaning methods. Always check if all traces of oil and other contaminations have been completely removed before applying Stellmann Aqualine PU PRO.</p> <p>Substrate must be sealed off from rising moisture. Apply sample area in case of doubt.</p>
Application Procedure and equipment	<p>Use PEKA Multitex Rollers. Stellmann Aqualine PU PRO is applied in two stages. The first layer acts as the “prime” layer and the second coat as the finish layer. A third layer is optional for high traffic areas. Add the Stellmann Non-Slip Particles only to the finish coat.</p> <p><b>Dilution Rates</b></p> <p>Dilute first “prime” coat with 20% of water (mixture of part A and Part B) for new applications. Dilute second finish coat with 0-10% of water.</p> <p>For renovations (previously applied Stellmann Aqualine PU PRO projects) dilute first “primer” layer with 0-10% of water. Dilute the second layer with 0-10% of water.</p> <p><b>Mix ratio:</b> 5-1. Part A = 5 and Part B is 1.</p> <p>Calculation: Multiply the amount of Part A poured in mixing cup/bucket by 0.2. The result is the amount of Part B that needs to be added.</p> <ul style="list-style-type: none"> <li>• Stir up Part A for 5 minutes with a mechanical mixer at low speed before use.</li> <li>• When mixing in smaller portions, use a clean mixing cup and an electrical precision scale to measure the mixing ratios.</li> <li>• When mixing smaller portions use a 5 to 1 mixing ratio by weight. Mix Part A and B with a clean mechanical mixer for at least 5 minutes.</li> <li>• Do not use milliliter mixing cups as product density is higher than water. Mixing without electrical precision scale will cause off ratio mixing. Any warranty is void when mixing is not conform instructions.</li> <li>• See extensive installation manual for a step-by-step guide.</li> </ul> <p><b>Application</b></p> <p>Do not apply a thick layer. A wet film thickness above approx. 150µm can cause “CO2-bubbles” in the coating.</p> <p><b>Prime Coat:</b> Mix the coating according to the 5-1 mixing ratio. Dilute the mixture in accordance with the above instructions with water. Apply the first layer to the surface. Only apply the second layer after first layer has dried (within 24 hours after applying the primecoat).</p> <p><b>Finish Coat:</b> Mix coating according to the 5-1 mixing ratio. Add Stellmann Non-Slip particles in the mixture (between 2 and 3% by weight) and dilute in accordance with the above instructions.</p> <p>The finish coat should be applied evenly. Apply in sections in a straight line and always finish in the same direction (away from the applicator). Do not use W or N shaped movements. Do not roll back into areas that are curing to avoid buildup of the non-slip particles.</p> <p><b>IMPORTANT:</b> Do not add more than 3% of the Stellmann Non-Slip particles to the mixture. Adding more particles will not increase the slip-rating.</p> <ul style="list-style-type: none"> <li>• Use mixing bucket/cup and an electronic precision scale.</li> <li>• Stir Part A thoroughly before use with an electrical mixer. Use a separate and clean mixer to stir the mixture of Part A and B thoroughly before use.</li> <li>• Only mix as much coating as will be immediately required. Securely fasten the lids of unused product to ensure it will not solidify.</li> <li>• Practical spreading rates will vary depending on such factors as method and conditions of applications and surface roughness.</li> </ul>

Slip Ratings	<p>The Stellmann Non-Slip Particles are added to the mixture of Part A and B as a percentage by weight. Use an electrical precision scale to measure. Mix in particles with an electrical mixer.</p> <p><b>P3 Stellmann Non-Slip Particles:</b> add 3 % by weight  <b>P4 Stellmann Non-Slip Particles:</b> add 2.5% by weight  <b>P5 Stellmann Non-Slip Particles:</b> add 2.5% by weight</p> <p><b>Example</b>          You mixed 2.4kg of Stellmann Aqualin PU Pro (2kg of Part A and 0.4kg of Part B). You want to achieve a P3 slip-rating. Therefore, you multiply <math>0.02 \times 2400 = 48</math>. Add 48 grams of the Stellmann Non-Slip P3 Particles to the mixture.</p>					
Curing	<p>At 20°C and 65% relative humidity and well-ventilated areas:</p> <p>Dust dry: ca. 2 hours          Re-coatable: ca. 12 to 24 hours          Trafficable: ca. 24 hours          Full curing time: ca. 3-7 days, depending on load, humidity, and temperature</p>					
Theoretical spreading	<p>The spreading rates depends on the porosity (absorbing capacity) of the substrate, as well as the application method and conditions. The theoretical spreading rate is circa 4-6m<sup>2</sup>/kg per coat.</p>					
Dilute	<p>Tap water, max. 25%</p>					
Chemical resistance	Chemical	After 1 hour	1 day	1 week	1 month	3 months
	Hydraulic oil	5/2	5/2	5/2	5/2	5/2
	Motor oil	5/2	5/2	5/2	5/2	5/2
	Petrol	5/2	5/2	5/2	4-5/2	4-5/2
	Diesel	5/2	5/2	4-5/2	4-5/2	4-5/2
	Water	5/2	5/2	5/2	5/2	5/2
	Salt water	5/2	5/2	5/2	5/2	5/2
	Cement water	5/2	5/2	4-5/2	4-5/2	4-5/2
	Hydrochloric acid (10%)	5/2	5/2	4-5/2	2-1/2	2/1
	Sodium hydroxide (10%)	5/2	5/2	4-5/2	4-5/2	4-5/2
	Xylene	5/2	5/2	5/2	5/2	5/2
	Bleach (5%)	5/2	5/2	4-5/2	4-5/2	4-5/2
	Paint thinner	5/2	5/2	5/2	5/2	5/2
	<b>Assessment</b>	<b>Optical</b> 5 = no change 1 = coating destroyed		<b>Mechanical</b> 2 = no change 0 = scratchable till surface		

Disposal	DO NOT REUSE CONTAINER. Do NOT pour waste material down the drain. Keep unwanted paint in sealed containers for disposal via special chemical waste collections including PAINTBACK. Alternatively waste paint should be brushed out onto newspaper and allowed to dry before disposal via domestic waste collections. For more information on responsible disposal of paint and packaging visit the Australian website at <a href="http://paintback.com.au">paintback.com.au</a> .
Handling	As with any chemical, ingestion, inhalation and prolonged repeated skin contact should be avoided by good occupational practice. Always wash hands before smoking, eating, drinking or using the toilet.
Other	For detailed information refer to the current Safety Data Sheet available through customer service or via <a href="mailto:info@stellmann.com.au">info@stellmann.com.au</a>

Shipment	Not dangerous goods, no special transport requirements.		
Flash Point	N/A	Dangerous Goods Class	N/A
UN Number	N/A		
Disclaimer	<p>The data provided within the Stellmann Aqualine PU PRO coating is correct at the time of publication, however it is the responsibility of those using this information to check that it is current prior to specifying or using any of these coating/product systems.: Any advice, recommendation, information, assistance or service provided by any of the divisions of Stellman Coatings or its related entities in relation to goods manufactured by it or their use and application is given in good faith and is believed by Stellmann be appropriate and reliable. Coating/product systems can be expected to perform as indicated on the spec sheet so long as applications and application procedures of the individual products are followed as recommended on the appropriate Product data Sheet. Customers are encouraged to make their own enquiries as to the material's characteristics and, where appropriate, to conduct their own tests in the specific context of the material's intended use. A warranty can only be given for the consistently high quality of our products. All previous versions of this data sheet are no longer valid.</p>		