

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 Low VOC. 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, 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 Low VOC
- 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 settings 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 HVLP 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

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	Up to 2 hours depending on temperature and humidity 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	Less than 0.5% by weight
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 and HVLP 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% < 3% building material moisture

Application Guide

Surface Preparation	New concrete must cure for a minimum of 28 days before applying Stellmann Aqualine PU PRO. Ensure surface is thoroughly dry before application (< 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/mm². All non-structural cracks and holes need to be repaired. 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.
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	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. Substrate must be sealed off from rising moisture. Apply sample area in case of doubt.
Application Procedure and equipment	Use Stellmann PRO 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. Mix ratio: 5-1 by weight. Part A = 5 and Part B is 1. Mixing with electrical precision scale is mandatory Calculation: Multiply the amount of Part A poured in mixing cup by 0.2 (shows amount of Part B) or 1.2 (shows total mixture amount). The result shows how much of Part B needs to be added. - Stir up Part A for 5 minutes with a mechanical mixer at low speed before use. - Use a clean mixing cup and an electrical precision scale to measure the mixing ratios. - Mix Part A and B with a clean mechanical mixer for at least 5 minutes at low speed - Do not use milliliter mixing cups as product density is higher than water. Mixing without electrical precision scale will cause off ratio mixing. - See the extensive installation manual for a step-by-step guide. Application Do not apply a thick layer. A wet film thickness above approx. 150µm can cause “CO2-bubbles” in the coating. Prime Coat Mixing - Mix the coating according to the 5-1 mixing ratio. - Dilute the mixture with 15-20% water. Apply the first layer to the surface. Only apply the second layer after the first layer has dried (within 24 hours after applying the primecoat). Example Prime Coat 1. Mix: A 1200 grams + B 240 grams =  1440 grams 2. Add Water: (20%) Mixture A+B 1440 grams +  288 grams =  1728 grams →  Apply

Finish Coat

1. Mix the coating according to the 5 - 1 mixing ratio.
2. Dilute with 0 – 5% water.
3. Add Stellmann Non-Slip particles to the mixture. Use an electrical precision scale to measure. Mix in particles with an electrical mixer.

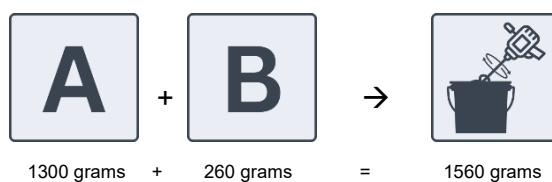
P3 Rating: add 3.0% by weight of Stellmann Non-Slip P3 Particles

P4 Rating: add 2.5% by weight of Stellmann Non-Slip P4 Particles

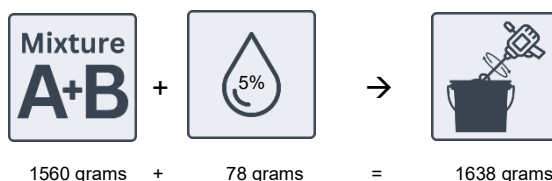
P5 Rating: add 2.0% by weight of Stellmann Non-Slip P5 Particles

Example Finish Coat

1. Mix:



2. Add Water:



3. P3 Rating:



Application

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.

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.

IMPORTANT: Do not add more than 3% of the Stellmann Non-Slip particles to the mixture. Adding more particles can reduce the slip-rating.

- Use mixing bucket/cup and an electronic precision scale.
- 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.
- Only mix as much coating as will be immediately required. Securely fasten the lids of unused product to ensure it will not solidify.
- Practical spreading rates will vary depending on such factors as method and conditions of applications and surface roughness.

Curing	At 20°C and 65% relative humidity and well-ventilated areas: Dust dry: ca. 2 hours Re-coatable: ca. 8 to 24 hours Trafficable: ca. 24 hours Full curing time: ca. 3-7 days, depending on load, humidity, and temperature					
Theoretical spreading	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 4-6m²/kg per coat.					
Dilute	Tap water, max. 25%					
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
	Assessment	Optical 5 = no change 1 = coating destroyed		Mechanical 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 paintback.com.au.		
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 info@stellmann.com.au		
Shipment	Not dangerous goods, no special transport requirements.		
Flash Point	N/A	Dangerous Goods Class	N/A
UN Number	N/A		
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