

THE LAB[®]

Chemicals & Coatings



Technical and Material Safety Data Sheet

Version: 2026



THE LAB PU FLOORSEAL

THE LAB WB PU FLOORSEAL

Product Family: Floor Coatings (Water-Based Polyurethane Floor Sealer)

Typical System Guidance

Typical Decorative Floor Sealing System

1. Inspect the substrate to ensure it is clean, dry and structurally sound.
2. Remove dust, dirt, grease, curing compounds and all contaminants.
3. Repair defects and ensure the floor is level where required.
4. Prime the substrate using the appropriate The Lab Floor Primer where specified.
5. Stir **THE LAB WB PU FLOORSEAL** thoroughly before use.
6. Apply a minimum of two coats by brush, roller or airless spray.
7. On raw cementitious screeds, apply three coats, as the first coat will penetrate the substrate.
8. Allow the specified drying time between coats and ensure the final coat cures completely before returning the floor to service.

Always select the appropriate The Lab floor coating system for the intended service conditions. Routine inspection and maintenance is recommended to maintain long-term coating performance.

Product Description

THE LAB WB PU FLOORSEAL is a premium, environmentally responsible, water-based polyurethane floor sealer formulated to provide a durable satin finish for interior and exterior decorative concrete floors. The advanced polyurethane technology delivers excellent wear resistance, low odour and rapid drying while maintaining low VOC emissions.

The coating is specifically developed for medium-duty commercial and residential flooring applications, including self-levelling screeds, where an attractive, durable protective finish is required.

The formulation complies with Green Building Council South Africa (GBCSA) environmental requirements and incorporates a Zero VOC tinting system that does not increase the VOC content of the finished product.

Technical Data Summary

Property	Typical Value
Product Type	Water-Based Polyurethane Floor Sealer
Binder Type	Water-Based Polyurethane
Colour Range	Clear, White, Pastel & Clear Base
Finish	Satin
Specific Gravity	1.19 ±0.05 kg/L
Viscosity	95–100 KU
pH	9.0–9.5
Solids by Mass	48% ±5%
Solids by Volume	55% ±5%
Pigment Volume Concentration	28% ±5%
Fineness of Grind	<10 microns
Coverage	Approximately 8 m ² /L per coat*
Recommended Coats	2 coats (3 coats on raw cementitious substrates)
Recommended DFT	51 µm per coat
Touch Dry	Less than 1 hour @23°C
Hard Dry	Less than 4 hours @23°C
Recoat Time	Minimum 6 hours
Drying Mechanism	Water evaporation followed by coalescence
VOC Content	Low VOC (<30 g/L)
Application Temperature	10°C–35°C
Relative Humidity	10–85%
Moisture Content	Maximum 10%
Storage Temperature	5°C–35°C
Shelf Life	12 months (unopened container)
Application Methods	Brush, Roller or Airless Spray
Clean Up	Clean Water
Packaging	1L, 5L and 20L

*Coverage will vary depending on substrate profile, porosity and application method.

These values are typical laboratory results and serve as a guide only. Practical coverage will vary depending on surface profile, porosity and application method.

Intended Uses

THE LAB WB PU FLOORSEAL is recommended for:

- Interior decorative concrete floors

- Exterior decorative concrete floors
- Residential garages
- Retail stores
- Offices
- Showrooms
- Light-duty warehouses
- Commercial walkways
- Self-levelling screeds
- Previously painted floor coatings (after suitable preparation)
- Decorative cementitious flooring

Principal Characteristics

- Premium satin polyurethane finish
- Water-based technology
- Low VOC formulation
- Environmentally responsible
- Excellent abrasion resistance
- Excellent wear resistance
- Fast drying
- Excellent adhesion
- Low odour
- Easy application
- Easy clean-up with water
- Suitable for interior and exterior use
- Excellent durability on medium-duty floors
- Compatible with self-levelling screeds

Environmental Benefits

- Complies with GBCSA environmental requirements
- Supports EU 2010 VOC targets
- Zero VOC tinting system
- Glycol Free
- APEO Free
- NPEO Free
- Formaldehyde Free tinting system

Limitations

THE LAB WB PU FLOORSEAL is not recommended:

- For heavy industrial flooring applications.
- For continuous chemical immersion.
- On damp substrates.
- Where substrate moisture exceeds 10%.
- Below 10°C or above 35°C.
- When relative humidity exceeds 85%.
- Where hydrostatic moisture pressure is present.

Do not allow more than 48 hours between coats without first cleaning the surface to remove possible contamination.

Surface Preparation

All substrates must be clean, dry and structurally sound.

Remove oil, grease, curing compounds, dust, laitance, loose coatings and contaminants that may impair adhesion.

Repair cracks and defects before coating.

For highly porous or new cementitious substrates, apply the appropriate The Lab primer where required.

Concrete moisture content must not exceed 10%, measured using an approved moisture meter.

Application Guidelines

Prior to application:

- Stir thoroughly before use.
- Confirm substrate moisture and environmental conditions are suitable.
- Apply by brush, roller or airless spray.
- Apply at the recommended spreading rate.
- Apply a minimum of two coats.
- Apply three coats on raw cementitious screeds.
- Allow a minimum of 6 hours between coats.
- Conduct a small test patch to confirm adhesion, appearance and compatibility prior to full application

Do not apply:

- Below 10°C.
- Above 35°C.
- During rain or when rain is imminent.
- Onto damp substrates.
- When relative humidity exceeds 85%.

Do not exceed 48 hours between coats. If this occurs, clean the surface thoroughly before recoating.

Typical Applications

- Residential garage floors
- Retail floors
- Commercial offices
- Shopping centres
- Schools
- Hospitals

- Light commercial warehouses
- Decorative polished concrete
- Self-levelling screeds
- Interior walkways

Storage

Store in tightly sealed original containers in a cool, dry, well-ventilated area.

Protect from frost, direct sunlight and excessive heat.

Recommended storage temperature: 5°C–35°C.

Rotate stock on a first-in, first-out basis.

Clean application equipment immediately after use with clean water.

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ROOF COATINGS Superior protection against harsh weather conditions.	WALL COATINGS Beautiful, durable finishes for interior and exterior walls.	FLOOR COATINGS High performance floor systems for every environment.	PRIMERS The perfect foundation for lasting adhesion and performance.	SEALERS Protect and seal surfaces with advanced sealer technologies.	TWIN PACKS & EPOXIES High build, chemical resistant systems for extreme performance.	CEMENTITIOUS SYSTEMS Engineered mortar and coatings for concrete protection.	DEGREASERS & SURFACE PREPARATION Clean, prepare and ensure maximum adhesion.	SPECIALIZED PROTECTIVE SYSTEMS Specialised solutions for the toughest protection needs.
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Technical Advisory, Specification Support and Disclaimer

The technical information, recommendations, specifications and system guidance contained in this document are provided in good faith and are based on laboratory testing, field experience and current product knowledge available at the date of publication. Such information is intended solely to assist specifiers, contractors, applicators and end users in selecting and applying suitable coating systems and does not relieve any party from independently assessing product suitability for the intended application and site conditions.

The performance of any coating system is materially dependent upon factors beyond the control of The Lab Chemicals & Coatings, including but not limited to correct substrate assessment, cleaning and decontamination procedures, surface preparation, substrate condition, moisture content, environmental conditions, product storage and handling, mixing procedures where applicable, film thickness achievement, adherence to specified system build requirements, application techniques and ongoing maintenance practices.

Failure to strictly follow the instructions, specifications, limitations and recommendations contained within this Technical Data Sheet, associated specifications, written recommendations or supplementary documentation may adversely affect product performance and may invalidate performance expectations, warranties or related claims.

Users are strongly advised to conduct suitability trials and test applications under actual site conditions prior to full-scale application.

To the best of our knowledge, the information contained herein is true and accurate at the date of issue and remains subject to change without prior notice. Users are advised to contact The Lab Chemicals & Coatings prior to specification or ordering to ensure that the correct product and system are selected for the intended application.

No guarantee, representation or warranty is given or implied regarding the completeness or suitability of information contained herein. Technical recommendations and advice do not constitute a performance guarantee unless expressly confirmed in writing by an authorised representative of The Lab Chemicals & Coatings.

The Lab Chemicals & Coatings accepts no responsibility or liability for product failure, defects, damage, consequential losses, injuries or unsatisfactory performance arising from incorrect substrate preparation, unsuitable application conditions, deviation from specified system requirements, misuse, unauthorised product modification, incorrect application methods or use outside documented recommendations. Liability, if any, shall be limited solely to replacement of proven defective product.

The above information must be read in conjunction with the General Terms and Conditions of The Lab Chemicals & Coatings (Pty) Ltd and The Lab George (Pty) Ltd, available at: www.thelabcc.co.za or upon request.

Material Safety Data



SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

CAS no. : N/A

EC no. : N/A

UN No. : 1263 SAPMA: 4-H-C

In emergency contact: The Lab Chemicals & Coatings @ 0845071767

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

EC Classification: Not classified as hazardous

No significant quantity of classified hazardous substances present.

(CL/RL = Controlled/Recommended level 'S' = Skin annotation)

SECTION 3. HAZARDS IDENTIFICATION

SAPMA Health Rating: 4-MINIMAL - No great risk to health

Inhalation: Avoid exposure to vapours, fumes and mists.

Skin: No hazard expected if used in moderation.

Eyes: No direct hazard is expected but possible contact with any chemical must always be avoided.

Ingestion: Irritating and nauseating.

No carcinogenic, mutagenic or genetic effects established

May have short term environmental effects. Contain, monitor & remove.

SECTION 4. FIRST AID MEASURES

Inhalation: Move to fresh air.

Skin: Always wash after handling chemical substances.

Eyes: In case of any contact and discomfort rinse well with water and seek medical advice.

Ingestion: Wash mouth with plenty of water. Do NOT induce vomiting. Seek medical attention.

SECTION 5. FIRE FIGHTING MEASURES

Dried residues - combustible with toxic fumes.

No direct explosion hazard expected.

SECTION 6. ACCIDENTAL RELEASE MEASURES - SEE ALSO SECTIONS 5, 8, 13

Contain & collect. Keep out of drains and sewers

SECTION 7. HANDLING AND STORAGE

Store separately from any reactive substances - oxidisers in particular.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

SAPMA Rating: 4-H-C PPE: Eye protection

Inhalation: In case of insufficient ventilation, use suitable respiratory protection.

Skin: Use only as directed.

Eyes: Avoid direct contact. Never touch eyes with dirty hands or gloves.

Ingestion: Observe the rules for hygiene. Wash before eating, drinking or smoking.



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical class: Non-hazardous material Description: Viscous liquid Smell: Pungent

FlashPoint (C): N/A

SECTION 10. STABILITY AND REACTIVITY

Stable under normal conditions

Inert - no reaction with fire-fighting water

SECTION 11. TOXICOLOGICAL INFORMATION

No carcinogenic, mutagenic or genetic effects established

SECTION 12. ECOLOGICAL INFORMATION

May have short term environmental effects. Contain, monitor & remove.

SECTION 13. DISPOSAL INFORMATION

Use reputable waste disposal contractors. Exercise caution in disposal of used containers.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous for transport



SECTION 15. REGULATORY INFORMATION

EC no. : N/A

EC Classification: Not classified as hazardous

S2 - Keep out of reach of children. (Retail sales items)

SECTION 16. OTHER INFORMATION

IN CASE OF ANY DISCOMFORT ALWAYS SEEK MEDICAL ADVICE.

This MSDS conforms to General Administrative Regulations of 6 Sept.1996 (ISO-11014/ANSIZ400.1.1996)

OELs derived from OHS Act Regulations for Dangerous Chemical Substances of 25 Aug.1995 (EH-42)

SAPMA Rating - South African Paint Manufacturers Association Guide to Health Hazards (SABS ARP 006:1991) All

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