

THE LAB[®]

Chemicals & Coatings



Technical and Material Safety Data Sheet

Version: 2026



BIO FLEXIWALL

THE LAB BIO-FLEXIWALL

Product Family: Wall Systems

Typical System Guidance

System selection should be based on substrate type and wall condition.

Typical exterior wall coating system:

1. **BIO-ALGAE** – treatment for fungal or algae contamination
2. **BIO-WASH** – wall cleaning and preparation
3. **BIO-ARP MASONRY PRIMER** – for previously painted substrates OR **BIO-PRIME primer** – for porous masonry substrates
4. **BIO-FLEXIWALL** – two coat flexible wall coating system

Regular inspection and maintenance is recommended to ensure long-term coating performance.

Product Description

BIO-FLEXIWALL is a high performance flexible exterior wall coating formulated using advanced modified copolymer technology designed to provide superior durability, crack-bridging capability and long-term weather protection for masonry substrates.

The coating cures to form a tightly adherent elastomeric film capable of accommodating normal building movement without cracking or delamination. This flexibility enables the coating to effectively bridge hairline plaster cracks while maintaining a durable decorative finish.

BIO-FLEXIWALL provides excellent resistance to ultraviolet degradation, environmental pollution and moisture ingress. The coating remains vapour permeable, allowing moisture trapped within the substrate to escape without causing blistering or coating failure.

The coating also provides an effective barrier against carbon dioxide diffusion which assists in protecting reinforced concrete structures from the harmful effects of carbonation.

BIO-FLEXIWALL is suitable for exterior masonry surfaces such as cement plaster, concrete, brickwork and fibre cement where a flexible protective coating system is required to maintain both durability and appearance.

BIO-FLEXIWALL forms part of The Lab integrated wall coating systems and should be applied in accordance with recommended surface preparation and system build guidelines.

Technical Data Summary

Product Type	Modified copolymer flexible wall coating
Finish	Satin / low sheen decorative finish
Colour Range	Tint ready and Standard Colours
Application Method	Brush, roller or airless spray
Recommended Coats	Minimum two coats
Coverage	+/- 6–8 m ² /L per coat depending on substrate
Touch Dry	±1–2 hours at 23°C
Recoat Time	±4 hours
Specific Gravity	1.25 – 1.28 kg/L
Non-Volatile Content	Mass 54–58%
Clean Up	Water while wet
Flammability	Non-flammable
VOC Content	Low VOC typical of water-based acrylic coatings
Shelf Life	+/- 12 months when stored under correct conditions

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

BIO-FLEXIWALL is recommended for:

- Exterior plastered walls
- Concrete surfaces
- Brickwork and masonry substrates

- Fibre cement wall panels
- Buildings requiring crack-bridging protection
- Exterior decorative wall coatings
- Structures exposed to severe weather conditions

The coating is particularly suitable for surfaces where minor plaster cracking and substrate movement may occur.

Not recommended for permanently submerged surfaces or areas subject to continuous water exposure.

Principal Characteristics

- Flexible elastomeric wall coating system
- Excellent crack-bridging capability
- High durability and long service life
- Excellent resistance to UV and weathering
- Vapour permeable coating allowing moisture escape
- Strong adhesion to primed masonry substrates
- Good resistance to pollution and environmental contaminants
- Water-based formulation with low odour
- Easy application by brush, roller or spray equipment

Surface Preparation

All surfaces must be sound, clean, dry and free from contamination such as dust, grease, oils, algae, fungal growth, chalking or loose material.

Biological contamination should be treated using **THE LAB BIO-ALGAE** treatment solution.

Surfaces should then be cleaned using **THE LAB BIO-WASH** or equivalent preparation cleaner to remove contaminants and loose material.

Previously painted surfaces must be inspected and any loose or poorly adhering coatings removed prior to application.

Porous or friable substrates should be primed using **THE LAB BIO-PRIME or ARP MASONARY PRIMER** prior to application.

All surfaces must be allowed to dry completely before coating application.

Application Guidelines

BIO-FLEXIWALL may be applied by brush, roller or airless spray equipment.

Apply a minimum of two coats to achieve uniform coverage and durability.

Prior to application, always follow these basic product checks:

- Inspect packaging and ensure containers are sealed, undamaged and within shelf-life
- Open product and visually inspect for abnormalities, contamination, skinning or separation
- Stir product thoroughly before and during use where required
- For multi-component products, ensure correct mixing ratios and induction periods are followed
- Confirm substrate condition, moisture levels and environmental conditions are suitable
- Conduct a small test patch to confirm adhesion, appearance and compatibility prior to full application

Do not apply coatings when:

- Ambient temperature is below 10°C
- Rain is imminent
- Surfaces are wet or contaminated

Ensure recommended spreading rates are maintained to achieve correct film thickness. Allow adequate drying time between coats.

Storage

Store in original sealed containers in a cool, dry and well-ventilated environment.

Protect from:

- Direct sunlight
- Extreme heat
- Freezing temperatures

Keep containers tightly closed when not in use.



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 information is given in good faith but without guarantee in respect of accuracy. No responsibility is accepted for errors or omissions or the consequences thereof.