

THE LAB[®]

Chemicals & Coatings



Technical and Material Safety Data Sheet

Version: 2026



BIO KLAD

BIO-KLAD

Product Family: Wall Systems

Typical System Guidance

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

Typical exterior waterproof wall coating system:

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

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

Product Description

BIO-KLAD is a premium pure acrylic exterior wall coating reinforced with built-in fibres designed to provide superior waterproofing protection, durability and crack-bridging performance for exterior masonry substrates.

The coating cures to form a tightly adherent flexible protective film that provides excellent resistance to ultraviolet degradation, environmental pollutants and water penetration. The integrated fibre reinforcement improves film strength and durability, enabling the coating to accommodate normal building movement while maintaining a continuous weatherproof barrier.

BIO-KLAD is engineered to provide long-term exterior protection for buildings exposed to severe environmental conditions. The coating remains vapour permeable, allowing trapped moisture within the substrate to escape while preventing water ingress that may cause structural deterioration.

The coating also provides effective resistance against carbonation of reinforced concrete structures and offers excellent resistance to pollution and atmospheric contaminants.

BIO-KLAD is suitable for exterior masonry surfaces including plaster, concrete, brickwork, fibre cement and suitably primed metal substrates where a high-performance waterproof decorative coating is required.

BIO-KLAD forms part of The Lab integrated exterior wall protection systems and should always be applied according to recommended preparation and system build guidelines.

Technical Data Summary

Product Type	Pure acrylic
Finish	Satin
Colour Range	Tint Ready (Pastel) and Standard Colours
Application Method	Brush, roller or airless spray
Recommended Coats	Minimum two coats
Coverage	+/- 4-6 (with fibre) / 6–8 m ² /L per coat depending on substrate
Touch Dry	±1 hours at 23°C
Recoat Time	±2 hours
Specific Gravity	+/- 1.25 – 1.28 kg/L
Non-Volatile Content	Mass 54–58%
Recommended WFT	+/- 120 microns
Recommended DFT	+/- 85 microns
Surface Temperature Limits	10 – 13 °C
Relative Humidity Limits	< 50°C
Clean Up	Water while wet
Flammability	Non-flammable
VOC	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-KLAD is recommended for:

- Exterior plastered walls
- Concrete surfaces
- Brickwork and masonry substrates
- Fibre cement wall panels
- Parapets and exterior architectural features

- Exterior wall waterproofing systems
- Structures exposed to severe weather conditions
- Buildings requiring enhanced durability and moisture protection

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

Principal Characteristics

- Premium pure acrylic exterior coating system
- Fibre reinforced waterproof coating technology
- Excellent resistance to water ingress
- High durability and long service life
- Flexible film with crack-bridging capability
- Excellent UV and weather resistance
- Vapour permeable allowing moisture escape
- Resistant to pollution and atmospheric contaminants
- Water-based formulation with low odour
- Easy application by brush, roller or spray

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 masonry surfaces should be primed with recommended **THE LAB BIO-PRIME or BIO-ARP MASONARY PRIMER** before applying the coating.

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

Application Guidelines

BIO-KLAD 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.

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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.

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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.