

THE LAB[®]

Chemicals & Coatings



Technical and Material Safety Data Sheet
Version: 2026



BIO SMARTROOF

THE LAB BIO-SMARTROOF

Product Family Classification: Roof Systems

Typical System Guidance

Typical roof coating system:

1. **BIO-ALGAE** – treatment for fungal or algae contamination
2. **BIO-WASH** – roof preparation cleaner
3. **BIO-PRIME Primer** – for porous mineral substrates OR
BIO-RUST Primer – for galvanised metal roofs
4. **BIO-SMARTROOF** – two coat topcoat system

Routine inspection and maintenance is recommended to maintain long-term coating performance.

Product Description

BIO-SMARTROOF is a high-performance water-based acrylic roof coating designed to provide enhanced durability and long-term weather protection for prepared roofing substrates. The advanced acrylic polymer formulation produces a flexible protective coating film with improved resistance to ultraviolet degradation, moisture ingress and environmental exposure.

BIO-SMARTROOF is positioned as a higher durability roof coating system compared with standard maintenance coatings and is suitable for roofs requiring longer service intervals and improved weather resistance.

The coating provides excellent adhesion to properly prepared asbestos fibre cement, concrete roof tiles, galvanised steel roofing and previously coated roof surfaces. When used as part of The Lab

integrated roof coating system with appropriate preparation and priming products, **BIO-SMARTROOF** provides durable protection and long-term decorative colour retention.

BIO-SMARTROOF forms part of The Lab professional roof coating systems and should be applied according to recommended preparation and system build guidelines.

Technical Data Summary

Product Type	Pure acrylic
Finish	Low sheen / satin
Colour Range	Standard Colours
Application Method	Brush, roller or airless spray
Recommended Coats	Minimum two coats
Coverage	+/- 8–10 m ² /L per coat depending on substrate
Recommended WFT	+/- 120 microns
Recommended DFT	+/- 85 microns
Surface Temperature Limits	10 – 13 °C
Relative Humidity Limits	< 50°C
Touch Dry	+/- 30 minutes at 23-25°C
Dry to Handle	+/- 1 hour
Recoat Time	+/- 2 hours
Full Cure	Over Night
Specific Gravity	+/- 1.18 kg/L
Viscosity	+/- 105 KU
Volume Solids	+/- 53%
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-SMARTROOF is recommended for:

- Long-term protection of residential and commercial roofs
- Maintenance coating of asbestos fibre cement roofs
- Corrugated and IBR metal roofing systems
- Galvanised roof sheeting and cladding
- Concrete and cement roof tiles
- Prepared galvanised gutters and downpipes
- Roof refurbishment projects requiring improved durability

Principal Characteristics

- High durability acrylic roof coating
- Superior adhesion to mineral and metal substrates
- Excellent UV and weather resistance
- Flexible coating film accommodating thermal movement
- Smooth satin decorative finish
- Good colour retention and durability
- Water-based formulation with low odour
- Easy application by brush, roller or spray

Surface Preparation

All surfaces must be clean, sound and completely dry prior to coating application.

Remove all dirt, grease, chalking coatings, fungal growth and loose material. Biological contamination should be treated using **THE LAB BIO-ALGAE** cleaning solution followed by rinsing with clean water.

Preparation guidelines:

Galvanised steel (new)

Clean thoroughly using **THE LAB BIO-WASH** to remove oil and contaminants and rinse until a water-break-free surface is obtained. Prime with **THE LAB BIO-RUST PRIMER**.

Weathered galvanised steel

Remove contaminants and white rust using BIO-WASH cleaning solution and rinse thoroughly before priming.

Fibre cement sheeting

Clean thoroughly using high-pressure water or mechanical brushing. Prime using **THE LAB BIO-PRIME**.

Concrete or cement roof tiles

Remove friable material using high-pressure water or brushing. Prime with **THE LAB BIO-PRIME**.

Previously painted surfaces must be cleaned and all poorly adhering coatings removed prior to recoating.

Application Guidelines

BIO-SMARTROOF 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 containers from:

- Direct sunlight
- Extreme heat
- Freezing temperatures

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SPECIALIZED COATING SOLUTIONS AND PAINT SYSTEMS
"Where quality meets purpose"

COMPLETE COATING SYSTEMS FOR EVERY SURFACE

ENGINEERED FOR PERFORMANCE. BUILT TO LAST.

 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 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.