

THE LAB[®]

Chemicals & Coatings



Technical and Material Safety Data Sheet

Version: 2026



BIO SILK

BIO-SILK

Product Family: Wall Systems

Typical System Guidance

System selection should be based on substrate condition and project requirements.

Typical interior decorative coating system:

1. **BIO-WASH** – cleaning of contaminated surfaces if required
2. **BIO-ARP MASONARY PRIMER** – for previously painted substrates OR **BIO-PRIME primer** – for porous masonry substrates
3. **BIO-SILK** – two coat decorative eggshell finish system

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

Product Description

BIO-SILK is a premium quality water-based acrylic interior coating designed to provide a smooth eggshell decorative finish with excellent durability, washability and long-term colour stability on interior wall and ceiling surfaces.

The coating forms a tightly adherent protective film with superior adhesion to properly prepared and primed substrates. Once cured, **BIO-SILK** produces a resilient decorative coating capable of withstanding frequent cleaning and general wear associated with residential, commercial and institutional interior environments.

BIO-SILK offers excellent resistance to ultraviolet degradation, environmental contamination and everyday household cleaning. The coating maintains an attractive eggshell finish while providing strong adhesion and long-term decorative performance.

The formulation is water-based, non-toxic and produces minimal odour during application. The coating does not require thinning and may be applied directly from the container using brush, roller or spray equipment.

BIO-SILK is suitable for application to interior plastered walls, ceilings, fibre-cement boards and other building substrates where a premium decorative eggshell finish is required.

BIO-SILK forms part of The Lab interior decorative coating systems and should always be applied according to recommended preparation and application guidelines.

Technical Data Summary

Product Type	Pure acrylic
Finish	Low sheen
Colour Range	Tint ready and 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
Touch Dry	±30 minutes at 25°C
Recoat Time	±2 hours
Recommended WFT	+/- 120 microns
Recommended DFT	+/- 85 microns
Surface Temperature Limits	10 – 13 °C
Relative Humidity Limits	< 50°C
Specific Gravity	+/- 1.25g/L
Viscosity	+/- 95 – 100 KU
Volume Solids	+/- 39%
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-SILK is recommended for:

- Interior plastered walls
- Interior ceilings
- Fibre cement boards and panels

- Decorative interior wall coatings
- Residential interior spaces
- Commercial and office environments
- Areas requiring a washable decorative finish

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

Principal Characteristics

- Premium interior acrylic decorative coating
- Smooth eggshell decorative finish
- Excellent durability and wash resistance
- Strong adhesion to properly primed substrates
- Excellent colour retention and UV stability
- Water-based formulation with very low odour
- Easy application by brush, roller or spray
- Suitable for residential and commercial interiors

Surface Preparation

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

Previously painted surfaces must be cleaned thoroughly and all loose or poorly adhering coatings removed before application.

Old enamel or oil-based coatings should be lightly sanded to create a matt surface profile to promote adhesion.

Porous or chalked surfaces should be sealed using **THE LAB BIO-PRIME or ARP MASONARY PRIMER** prior to application.

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

Trial test patches are recommended before large scale application.

Application Guidelines

BIO-SILK 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
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