

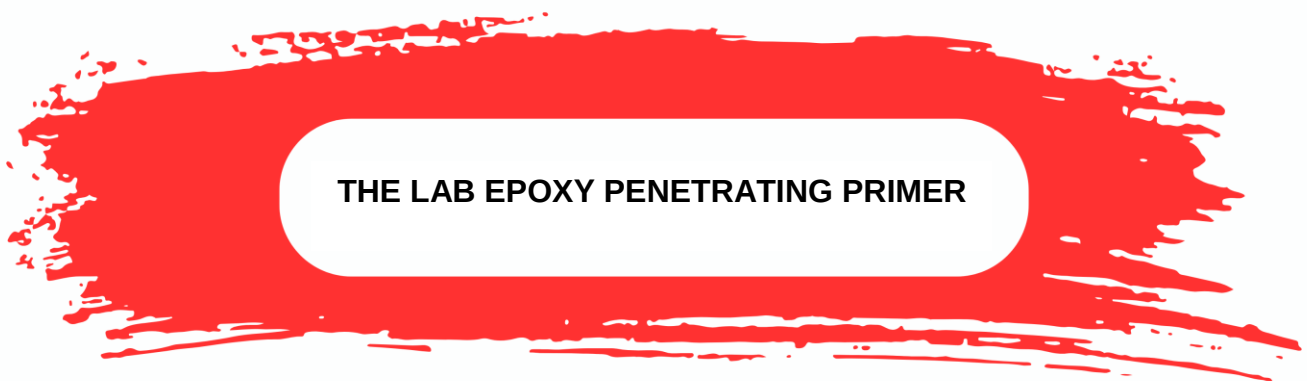
THE LAB®

Chemicals & Coatings



Technical and Material Safety Data Sheet

Version: 2026



THE LAB EPOXY PENETRATING PRIMER

THE LAB EPOXY PENETRATING PRIMER

Product Family: **Twin Packs and Epoxies**

Typical System Guidance

THE LAB EPOXY PENETRATING PRIMER is typically used as the first layer in epoxy flooring and protective coating systems. One coat should be applied at approximately **7–9 m² per litre**, depending on substrate porosity and condition. Highly porous or absorbent substrates may require a second coat to achieve complete sealing and substrate consolidation.

Once the primer has cured and reached the recommended over coating window, subsequent coating systems such as **THE LAB EPOXYCOAT 421**, self-levelling epoxy systems, epoxy mortars or polyurethane topcoats may be applied in accordance with the relevant system specification.

Typical Concrete Coating System:

- 1 **THE LAB EPOXY PENETRATING PRIMER**
- 2 **THE LAB EPOXYCOAT 421** High Build Epoxy
- 3 **THE LAB POLYGUARD POLYURETHANE** Topcoat

Product Description

THE LAB EPOXY PENETRATING PRIMER is a two-component epoxy polyamide primer designed to penetrate and seal porous concrete substrates prior to the application of epoxy or polyurethane coating systems. The primer forms a strong bonding interface between the substrate and subsequent coatings, significantly improving adhesion and durability of the overall coating system. Its low viscosity allows it to penetrate deeply into cementitious surfaces, consolidating weak or dusty substrates while providing excellent sealing properties. The coating exhibits good flexibility, chemical resistance and excellent adhesion to concrete surfaces. It is specifically developed for use in

industrial flooring systems, garages, warehouses and production facilities where epoxy flooring systems are applied. The primer can also tolerate limited moisture in the substrate when appropriate additives are incorporated, making it suitable for demanding industrial environments.

Technical Data Summary

Property	Typical Value
Type	Epoxy / Polyamide Penetrating Primer
Recommended Use	Primer and sealer for concrete and selected timber substrates
Colour	Clear
Solids by Volume	+/- 40%
Specific Gravity	+/- 0.99 kg/L
Flash Point	Base: 24°C / Activator: 27.5°C
Mixing Ratio	4:1 (Base : Activator)
Pot Life	+/- 6 hours at 20°C
Coverage	+/- 7 – 9 m ² /L depending on substrate porosity
Recommended WFT	60–80 microns
Recommended DFT	32–48 microns
Touch Dry	+/- 2 hours at 20°C
Hard Dry	+/- 4 hours at 20°C
Minimum Overcoating Time	24 hours / Overcoat within 72 hours
Thinner	The Lab Epoxy Thinners
Application Methods	Airless Spray, Brush or Roller
Surface Temperature Limits	10 – 13 °C
Relative Humidity Limits	< 85°C
Full Cure	7 days
Operating Temperature Range	10°C – 80°C
Storage Temperature	+5°C to +25°C
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

THE LAB EPOXY PENETRATING PRIMER is a low-viscosity penetrating epoxy primer and sealer designed for use on concrete floors and walls prior to the application of epoxy and polyurethane coating systems. The product penetrates porous substrates, reduces dusting, improves substrate integrity and promotes adhesion of subsequent coating layers.

It is suitable for use in:

- Factories and warehouses
- Parking garages

- Breweries and beverage production facilities
- Abattoirs and food processing facilities
- Dairies and commercial kitchens
- Industrial production areas
- Nuclear decontamination and specialised containment facilities

The product is particularly effective for sealing porous or dusty concrete surfaces and forms an integral part of many high-performance flooring and protective coating systems where optimum substrate bonding is required.

THE LAB EPOXY PENETRATING PRIMER may also be used as a dust-sealing treatment for suitably prepared concrete surfaces and, where specified, as a clear gloss sealing coat for concrete and cementitious substrates.

Principal Characteristics

- Excellent penetration into porous substrates
- Strong adhesion to cementitious surfaces
- Seals dusty and weak concrete surfaces
- Compatible with epoxy and polyurethane topcoats
- Good flexibility and durability
- Good chemical resistance
- Improves performance and life of coating systems
- Can tolerate limited moisture in substrate with additives

Surface Preparation

All surfaces must be clean, dry, structurally sound and free from oil, grease, dirt, dust and other contaminants that may impair adhesion. Concrete substrates should be prepared mechanically by abrasive blasting, diamond grinding or other suitable preparation methods to remove laitance and achieve an open-textured surface profile. Acid etching may be used where appropriate and must be followed by thorough rinsing and drying of the substrate.

All loose and friable material must be completely removed prior to application, preferably by industrial vacuum cleaning. Concrete moisture content should not exceed 5% by weight. Surfaces must be properly prepared and dry before coating application to ensure optimum penetration, adhesion and long-term performance.

Application Guidelines

THE LAB EPOXY PENETRATING PRIMER is supplied as a two-component system consisting of a base component and activator. The components must be mixed in the specified ratio and thoroughly blended using slow-speed mechanical mixing equipment until a uniform mixture is achieved.

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 components thoroughly before mixing and application
- Confirm correct mixing ratios are followed
- Verify substrate condition, moisture levels and environmental conditions are suitable
- Conduct a small test patch to confirm penetration, adhesion and compatibility before full application

The product may be applied by brush, roller or spray equipment. Over coating may proceed once the applied primer is touch dry and within the recommended over coating window.

Equipment should be cleaned immediately after use using **THE LAB EPOXY THINNERS** or an approved equivalent solvent.

Storage

Store in original sealed containers between 5°C and 25°C in a dry and well-ventilated area. Protect containers from direct sunlight, heat and moisture. When stored under recommended conditions the product has a shelf life of approximately 12 months.

THE LAB°
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

ACTIVATOR



SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

CAS no. : N/A

EC no. : N/A

UN No. : 1866 Hazchem: 3[Y]

SAPMA: 2-H-E

In emergency contact: The Lab Chemicals & Coatings @ 0845071767

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

[- R10][Xi R43]

EC Classification: - Xi R10,43 S02,13,24,37,43A,46

HAZARDOUS AND/OR OTHER RELEVANT COMPONENTS

XYLENE >12.5%

[CAS #: 1330-20-7] [E.C. #: 601-022-00-9]

EEC Labels: XN OEL 435mg OEL 100ppm STOEL 650.mg STOEL 150.ppm RL+ S

LIQUID EPOXY RESIN M.Wt <700 >1%

[CAS #: NQ] [E.C. #:]

EEC Labels: XI

N-BUTANOL <5%

[CAS #: 71-36-3] [E.C. #: 603-004-00-6]

EEC Labels: XN OEL 150mg OEL 50ppm STOEL 150mg STOEL 50ppm RL S

SABUTOL - NOW CALLED BUTYLOL <5%

[CAS #: 71-36-3] [E.C. #: 603-004-00-6]

EEC Labels: XN OEL 150mg OEL 50ppm STOEL 150mg STOEL 50ppm RL S

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

SECTION 3. HAZARDS IDENTIFICATION

SAPMA Health Rating: 2-MODERATE - Temporary or minor injury possible even if treatment given

Inhalation: Irritating, narcotic. Can affect CNS.

Skin: HARMFUL BY CONTACT. Potential sensitizer.

Eyes: Irritating.

Ingestion: Irritating and nauseating.

No carcinogenic, mutagenic or genetic effects established

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

Skin Sensitizer

SECTION 4. FIRST AID MEASURES

Inhalation: Move to fresh air. In case of discomfort seek medical attention.

Skin: Use hand cleaner/soap & water. Remove contaminated clothing. If any discomfort get medical attention

Eyes: Rinse immediately with plenty of water. Seek medical advice if symptoms persist.

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

SECTION 5. FIRE FIGHTING MEASURES

Flammable with toxic fumes.

Containers liable to burst in a fire.

Foam. CO2. Dry powder. Fog to cool and control. Do NOT use water jets.

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

Contain & collect. Use an inert - NOT sawdust. Keep out of drains & sewers.

SECTION 7. HANDLING AND STORAGE

Store separately from any reactive substances - oxidisers in particular.

No open flames. No smoking.

Store containers with due care in case of fire.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

SAPMA Rating: 2-H-E PPE: Respirator and Eye protection

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

Skin: Avoid direct contact. Use barrier cream and impervious gloves.

Eyes: Use face shield & goggles or full face respirator/hood. Avoid direct contact.

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

OEL Type: Mix- Mixture - See Section 2 Skin annotation

Skin Sensitizer



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical class: e.g.: Paint Product Description: Viscous liquid

Smell: Pungent

Boil. pt: >35

FlashPoint: >23

SECTION 10. STABILITY AND REACTIVITY

Stable under normal conditions

Could generate static - USE EARTHING

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

Hazardous. Use reputable waste disposal contractors. Destroy used containers.

SECTION 14. TRANSPORT INFORMATION

UN no: 1866 Packing group: III IMO Class: 3.3

Hazchem: 3[Y]



SECTION 15. REGULATORY INFORMATION

EC no. : N/A Contains: XYLENE

EC Classification: - Xi R10,43 S02,13,24,37,43A,46

R10 - Flammable

R43 - May cause sensitisation by skin contact

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

S13 - Keep away from food, drink and animal feeding stuffs

S24 - Avoid contact with the skin

S37 - Wear suitable gloves

S43A - In case of fire, use water fog, foam or powder - Do not use water jets!

S46 - If swallowed seek medical advice immediately and show this container or label



SECTION 16. OTHER INFORMATION

THIS SUBSTANCE IS A POTENTIAL SENSITISER - ENSURE PRECAUTIONS ARE TAKEN.
IN CASE OF ANY DISCOMFORT ALWAYS SEEK MEDICAL ADVICE.

ACTIVATOR



SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

CAS no. : N/A

EC no. : N/A

UN No. : 1760

APMA: 2-H-C

In emergency contact: The Lab Chemicals & Coatings @ 0845071767

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

[Xn R21/22][Xi R34][Xi R43][,N R52/53]

EC Classification : Xn,Xi, N R21/22,34,43,52/53 S36/37/39,37/39,02,13,46,56,59

Skin annotation

HAZARDOUS AND/OR OTHER RELEVANT COMPONENTS

ISOPHORONEDIAMINE (IPD) >25%

[CAS #: 2855-13-2] [E.C. #: 612-067-00-9]

EEC Labels: C

LIQUID EPOXY RESIN M.Wt <700 >1%

[CAS #: NQ] [E.C. #:]

EEC Labels: Xi

TRIMETHYL TETRADIAMINE (TMD) _ >10%

[CAS #: N.E.] [E.C. #:]

EEC Labels: C

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

SECTION 3. HAZARDS IDENTIFICATION

SAPMA Health Rating: 2-MODERATE - Temporary or minor injury possible even if treatment given

Inhalation: Irritating, narcotic. Can affect CNS.

Skin: HARMFUL BY CONTACT. Potential sensitizer.

Eyes: Corrosive. Damage possible.

Ingestion: Corrosive.

No carcinogenic, mutagenic or genetic effects established
May cause undesirable effects to aquatic organisms.
Skin Sensitizer

SECTION 4. FIRST AID MEASURES

Inhalation: Move to fresh air. In case of discomfort seek medical attention.
Skin: Use hand cleaner/soap & water. Remove contaminated clothing. If any discomfort get medical attention
Eyes: ACT FAST! - Rinse immediately with plenty of water and refer to doctor immediately.
Ingestion: Wash mouth with plenty of water. Do NOT induce vomiting. Refer immediately to Doctor.

SECTION 5. FIRE FIGHTING MEASURES

Combustible with toxic fumes.
Containers liable to burst in a fire.
Foam. CO2. Dry powder. Fog to cool and control. Do NOT use water jets.

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

Contain & collect. Use Inert NOT sawdust. Keep waste separate for disposal.

SECTION 7. HANDLING AND STORAGE

Store separately from any reactive substances - oxidisers in particular.
No open flames. No smoking.
Store containers with due care in case of fire.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

SAPMA Rating: 2-H-C PPE: Eye protection
Inhalation: In case of insufficient ventilation, use suitable respiratory protection.
Skin: Avoid direct contact. Use barrier cream and impervious gloves.
Eyes: Use face shield. Avoid direct contact.
Ingestion: Observe the rules of hygiene. Wash before eating, drinking or smoking.
Skin annotation
Skin Sensitizer



SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical class: e.g.: Paint Product Description: Viscous liquid Smell: Pungent
FlashPoint: >61

SECTION 10. STABILITY AND REACTIVITY

Stable under normal conditions
Could generate static - USE EARTHING
Inert - no reaction with fire-fighting water

SECTION 11. TOXICOLOGICAL INFORMATION

No carcinogenic, mutagenic or genetic effects established

SECTION 12. ECOLOGICAL INFORMATION

May cause undesirable effects to aquatic organisms.

SECTION 13. DISPOSAL INFORMATION

Hazardous. Use reputable waste disposal contractors. Destroy used containers.

SECTION 14. TRANSPORT INFORMATION

UN no: 1760 Packing group: III IMO Class: 8



SECTION 15. REGULATORY INFORMATION

EC no. : N/A Contains: ISOPHORONEDIAMINE (IPD)

EC Classification : Xn,Xi, N R21/22,34,43,52/53 S36/37/39,37/39,02,13,46,56,59

R21/22 - Harmful in contact with the skin and if swallowed

R34 - Causes burns

R43 - May cause sensitisation by skin contact

R52/53 - Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

S37/39 - Wear suitable gloves and eye/face protection

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

S13 - Keep away from food, drink and animal feeding stuffs

S46 - If swallowed seek medical advice immediately and show this container or label

S56 - Do not discharge into drains or the environment; dispose to an authorised waste collection point

S59 - Refer to manufacturer/supplier for information on recovery/recycling



SECTION 16. OTHER INFORMATION

THIS SUBSTANCE IS A POTENTIAL SENSITISER - ENSURE PRECAUTIONS ARE TAKEN. 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.