THE LAB®

Chemicals & Coatings

Technical and Material Safety Data Sheet

Version: 2026

THE LAB EPOXY CEMENT KIT
Product Family: Twin Packs and Epoxies (Epoxy Cementitious Repair System)

Typical System Guidance

Typical repair procedure:

1 Remove damaged or loose concrete
2 Mechanically prepare the repair area
3 Apply **THE LAB Epoxy Penetrating Primer** if required
4 Mix and apply **THE LAB Epoxy Cement Kit** repair mortar
5 Finish and level repair surface as required
6 Allow adequate curing before applying protective coatings if needed

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

Product Description

THE LAB EPOXY CEMENT KIT is a multi-component epoxy cementitious repair and resurfacing system designed for repairing damaged concrete surfaces and creating durable, high-strength floor repairs. The system combines epoxy resin technology with specially graded aggregates to produce a dense, mechanically strong repair mortar capable of restoring structural integrity to deteriorated or damaged concrete substrates.

Once cured, the system forms a tough, chemically resistant repair material with excellent adhesion to concrete surfaces. The repaired areas exhibit high compressive strength, good abrasion resistance and long-term durability in industrial environments. The Epoxy Cement Kit is particularly suitable for

repairing spalled concrete, potholes, floor joints and damaged areas in industrial floors where fast return to service and long-term durability are required.

Suitable for:

- steel
- aluminium
- fibreglass
- wood
- above and below the waterline

It also mentions that the filler incorporates hollow spheres, producing a lightweight, easily sanded repair compound with an excellent finish

Technical Data Summary

Product Type	Epoxy Cementitious Repair System
Components	Resin + Hardener + Aggregate
Finish	Semi-smooth
Mixing Ratio	Mix complete kit or maintain a 2:1 ratio by volume when using partial
Pot Life	+/- 25–30 minutes @25°C
Initial Set	+/- 4 – 6 hours
Full Cure	+/- 5 – 7 days
Compressive Strength	>50 MPa
Adhesion to Concrete	Excellent
Chemical Resistance	Good resistance to oils and chemicals
Application Thickness	5 – 25 mm
Application Temperature	10°C – 35°C
Shelf Life	24 months
Heat Distortion	>85°C
Water Smoothable	Yes
Sandable	Yes
No Shrinkage	100% Solids
Sag Resistance	Excellent
Clean-up	Water (Before cure)

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 CEMENT KIT is designed for repairing damaged concrete surfaces and restoring industrial floors. The product is suitable for repairing spalled concrete, filling potholes, repairing expansion joints and resurfacing worn concrete areas. Typical applications include factory floors,

warehouses, workshops, production areas, loading bays and other industrial environments where durable concrete repairs are required.

Resistant to seawater, dilute acids, dilute alkalis, petroleum products and many aliphatic solvents.

Principal Characteristics

- High strength epoxy cement repair system
- Excellent adhesion to concrete substrate
- High compressive and mechanical strength
- Excellent abrasion resistance
- Resistant to oils, fuels and many industrial chemicals
- Suitable for repairing spalled or damaged concrete
- Durable repair for industrial floor environments
- Long service life
- Lightweight repair mortar
- Water smoothable
- Easy sanding after cure
- Minimal shrinkage (100% solids)

Surface Preparation

Concrete surfaces must be structurally sound, clean and free from dust, oil, grease, curing compounds and loose material. Damaged or deteriorated concrete should be removed back to sound material using mechanical preparation methods such as chipping, grinding or abrasive blasting.

The repair area should be roughened to create a good mechanical key. All dust and debris must be removed using vacuum equipment prior to applying the repair system. The substrate should be dry and properly prepared to ensure maximum adhesion.

Steel

- Abrasive blast to Sa 2½.
- Prime with THE LAB Epoxy Silver (Zinc Phosphate Primer).

Aluminium

- Sweep blast or grind.
- Prime with HB Epoxy Primer.

Fibreglass

- Sand with 80–100 grit.

Wood

- Sand with 80–100 grit.

Application Guidelines

THE LAB EPOXY CEMENT KIT is supplied as a multi-component system consisting of epoxy resin, hardener and aggregate components. The resin and hardener must first be mixed thoroughly until a uniform mixture is achieved. The aggregate component is then gradually added while mixing to produce a uniform mortar.

The repair material should be applied immediately after mixing using a trowel or suitable placement tools. The material should be compacted firmly into the prepared repair area and finished to the required level.

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 moisture, direct sunlight and extreme temperatures.

Recommended storage temperature is between 5°C and 25°C. When stored correctly the product has a typical shelf life of approximately 12 months.

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High build, chemical resistant systems for extreme performance.

CEMENTITIOUS SYSTEMS
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Clean, prepare and ensure maximum adhesion.

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Specialised solutions for the toughest protection needs.

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. : N/A
SAPMA: 2-H-C
In emergency contact: The Lab Chemicals & Coatings @ 0845071767

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS
[Xi R43]
EC Classification: Xi R43 S02,13,24,37,46
HAZARDOUS AND/OR OTHER RELEVANT COMPONENTS
LIQUID EPOXY RESIN M.Wt <700 >1%
[CAS #:] [E.C. #:]
EEC Labels: XI
(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.
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.
Ingestion: Wash mouth with plenty of water. Do NOT induce vomiting. Seek medical advice.

SECTION 5. FIRE FIGHTING MEASURES
Combustible with toxic fumes.
Solvent Free. Fire Rating - 4 Minimal
Foam. CO2. Dry powder. Fog to cool and control. Do NOT use water jets.
Cool containers in case of fire.

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.
Keep containers cool.

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 goggles. Avoid direct contact.
Ingestion: Observe the rules of hygiene. Wash before eating, drinking or smoking.
Skin Sensitizer

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
Chemical class: Non-hazardous material Description: Viscous liquid Smell: Pungent
FlashPoint (C): >100

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
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: Xi R43 S02,13,24,37,46
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
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: N/A
SAPMA: 2-H-C
In emergency contact: The Lab Chemicals & Coatings @ 0845071767

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS
[Xi R43]
EC Classification: Xi R43 S02,13,24,37,46
HAZARDOUS AND/OR OTHER RELEVANT COMPONENTS
AMINOPOLYAMIDE. >1%
[CAS #:] [E.C. #:]
EEC Labels: XN MIX
(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: Highly irritating.
Skin: HARMFUL BY CONTACT. Potential sensitizer.
Eyes: Irritating.
Ingestion: Irritating.
No carcinogenic, mutagenic or genetic effects established
Medium to long term environmental effects. Contain, collect & 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.
Ingestion: Wash mouth with plenty of water. Do NOT induce vomiting. Seek medical advice.

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 and collect spilled material using inert absorbent material. Prevent entry into drains, waterways and soil. Dispose of waste through an approved waste disposal contractor in accordance with local regulations.

SECTION 7. HANDLING AND STORAGE
Store separately from any reactive substances - oxidisers in particular.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
SAPMA Rating: 2-H-C PPE: Eye protection

Inhalation: Avoid breathing vapours. Use respiratory protection.
Skin: Avoid direct contact. Use barrier cream and impervious gloves.
Eyes: Use goggles. Avoid direct contact.
Ingestion: Observe the rules of hygiene. Wash before eating, drinking or smoking.
Skin Sensitizer

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
Medium to long term environmental effects. Contain, collect & 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

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EC no. : N/A
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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.