

| Introduction

Alka 111 Epoxy Novolac Coating is a two-component, 100% solids, fast cure epoxy coating with exceptional chemical resistance to acids, alkalis, oils, fats and solvents. The low solvent, low odour content allows the product to be used in relatively confined spaces. It is used for protecting concrete floors in areas that demand a high level of chemical resistance.

An epoxy floor coating system is a multi-layered application that provides a tough, durable, and attractive finish to concrete floors. 100% solids epoxies are ideal for various applications where high performance and environmental considerations are important.

| Where it could be used.

Alka 111 has been formulated with high chemical resistance and heavy-duty application in mind and it can be used in: Industrial and commercial uses, warehouses, storage and packaging areas, Food and beverage processing, in electric and power plants, garbage and clean rooms, high traffic areas, aero-space such aircraft and helicopter hangers, food and beverage productions, waste waters, sewerages and all other industrial application.

| Benefits

- LOW VOC: 100% solid, solvent-free,
- Excellent chemical resistant,
- High gloss and durable surface,
- Excellent bond strength,
- Easy application/Can be applied by brush or roller,
- Multi-purpose use,
- Impact resistant, hard wearing and abrasion resistant,
- Designed to take heavy loads,
- Low maintenance,
- Good mechanical resistance,
- Economical.

| How to Apply

Surface Preparation

- **Clean the Floor:** Thoroughly clean the floor to remove dirt, grease, oil, or any other contaminants. Use a degreaser or detergent for areas with oil or grease stains.
- **Repair Cracks and Holes:** Use a concrete patching material to fill in any cracks, holes, or imperfections. Allow it to fully dry before proceeding.
- **Grind or shot blast the Floor:** If the floor is smooth, you'll need to roughen it using a floor grinder or shot blaster. This helps the epoxy bond better to the concrete. Clean the dust afterward with a vacuum or broom.
- **Test for Moisture:** Check for moisture levels in the concrete by taping plastic sheets to the floor for 24 hours. If moisture builds up underneath, the floor may not be suitable for epoxy application.

Alka 111 is a versatile product and can be applied by brush, roller, squeegee, or airless spray at 0.6mm -0.7 mm per coat or:

- Approximately 0.25–0.4 kg/m² applied as a roller coating.
- Approximately 1.5–2.0 kg/m² applied as a self-smoothing wearing course or as finish locking coats on textured finishes.

First, stir component A thoroughly with a paddle mixer for 2 minutes. Then pour Component B into the Part A container. Mix with an electric stirrer for at least 3 minutes. Alka 111 is a versatile product and can be applied by brush, roller or spray. The recommended coating thickness is approximately 0.2mm -0.3 mm per coat. After application and for the cleaning process, Xylene can be used for cleaning tools and equipment before the mixed compound begins to harden. Once cured, it must be removed mechanically.

| Important Notes

- Do not add any water.
- Do not apply Alka 111 on any substrates where significant vapor pressure may occur.
- Always ensure good ventilation when using Alka 111 in a confined space.
- Freshly applied Alka 111 should be protected from damp, condensation and water for at least 24 hours.
- If in doubt about the use or application of this product, or further information please contact our Alka Technical Department.
- Avoid contact with skin and eyes.
- Wear protective gloves and eye protection during work.
- If skin contact occurs, wash skin thoroughly.
- If in eyes, hold eyes open, flood with warm water and seek medical attention without delay.
- Avoid contact with foodstuffs and utensils.

Chemical	Resistance	Comments
Acids		
Hydrochloric Acid (10%)	Excellent	Commonly used in industrial applications.
Hydrochloric Acid (20%)	Excellent	Commonly used in industrial applications.
Hydrochloric Acid (36%)	Good	Commonly used in industrial applications.
Sulfuric Acid (30%)	Excellent	High concentration sulfuric acid is resisted effectively.
Sulfuric Acid (50%)	Excellent	High concentration sulfuric acid is resisted effectively.
Sulfuric Acid (70%)	Excellent	High concentration sulfuric acid is resisted effectively.
Nitric Acid (up to 30%)	No data	Resistance diminishes at higher concentrations.
Acetic Acid (up to 5%)	Excellent	Resistant to weak organic acids.
Acetic Acid (up to 10%)	Poor	
Phosphoric Acid (up to 85%)	Excellent	Handles high concentrations well.
Lactic Acid (up to 10%)	Poor	
Alkalis		
Sodium Hydroxide (up to 30%)	Excellent	Common industrial alkali, no significant degradation.
Potassium Hydroxide (up to 50%)	Excellent	High alkali resistance.
Ammonium Hydroxide (up to 10%)	Excellent	Resistant to weak bases.
Petroleum Products		
Gasoline	Excellent	Highly resistant to hydrocarbon-based fuels.
Diesel Fuel	Excellent	No significant impact.
Jet Fuel	Excellent	Well-suited for aerospace applications.
Motor Oil	Excellent	Can withstand prolonged exposure to motor oils.
Salts and Brines		
Sodium Chloride (saltwater)	Excellent	Good resistance to salt and brine solutions, suitable for marine use.
Calcium Chloride	Excellent	Suitable for environments exposed to de-icing salts.
Magnesium Chloride	Excellent	No significant degradation.
Other Chemicals		
Hydrogen Peroxide (up to 30%)	Good	Limited resistance to highly concentrated hydrogen peroxide.
Formaldehyde	Good	Moderate chemical resistance.
Phenol	Excellent	Handles phenolic compounds well, making it ideal for chemical industries.

Key Notes:

- **Excellent:** Indicates minimal to no damage or degradation when exposed to the chemical.
- **Good:** Some resistance but may degrade over time with continuous exposure or higher concentrations.
- **Poor:** Significant degradation or damage occurs with exposure.

For applications involving specific chemicals or extreme conditions, it's important to consult with the product manufacturer for a detailed chemical resistance chart based on the specific formulation of Novolac epoxy you are using.

A full Material Safety Data Sheet (MSDS) is available from Alka on request.

Technical and Physical Data

Form	Component A Component B	Coloured, liquid transparent liquid
	Available in Australian Standards AS2700 Colours and RAL K7	
Density (at 20°C)	Comp A + B: 1.6 kg/litre	
Mix Ratio	Comp A : B = 5:1 by weight (or 3:1 volume)	
Pot Life (at 20°C)	Approximately 20 minutes	
Application Temperature (ambient & substrate)	Minimum substrate temperature: +10°C Maximum substrate temperature: + 40°C Maximum relative humidity: ~ 80%	
Cure times	Touch Dry: Light traffic: Full cure:	8 Hours @ 20°C approx. 3 Days @ 20°C approx. 7 days @ 20°C approx.
Substrate Moisture Content	Maximum of 12% by weight	
Storage	Minimum of 12 months in unopened containers when stored free from frost in dry conditions between 10°C and 30°C. Component B is classed as non- hazardous for transportation.	
Packaging	Pre-proportioned units (A+B) in 24kg. (16 Litres)	

All products are subject to Alka terms and conditions. Read the full version on our website prior to any purchase.

| Contact us

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