Alka 110

2-Component, High Performance, Multi-Purpose, Self-Smoothening Epoxy Coating

| Introduction

Alka 110 is a general purpose, two component, high solids, epoxy system that can be used in heavy duty applications. Versatile application methods such as brushing, rolling or spraying.

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. Due to the absence of solvents, 100% solids epoxies offer several advantages such as

- Stronger bond: They cure to form a denser and more solid coating, resulting in superior adhesion and durability.
- Chemical resistance: They are typically more resistant to chemicals, abrasions, and wear compared to solvent-based epoxies.
- Lower odor: The lack of solvents translates to minimal odor during application.

| Where it could be used.

Alka 110 has been formulated with 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,
- High gloss and durable surface,
- Good chemical resistant,
- Excellent bond strength,
- Easy application/Can be applied by brush or roller,
- Multi-purpose use,
- Impact resistant, hard wearing and abrasion resistant,
- Rejuvenates worn surfaces, to a smooth finish,
- 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 110 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 110 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 110 on any substrates where significant vapor pressure may occur.
- Always ensure good ventilation when using Alka 110 in a confined space.
- Freshly applied Alka 110 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.

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Chemical Resistance of Cycloaliphatic Epoxy for Flooring:

Chemical Type	Resistance	Comments
Acids		
- Sulfuric Acid (up to 10%)	Excellent	Handles low to moderate concentrations
- Hydrochloric Acid (up to 10%)	Good	Resistant to splash/spill exposure
- Nitric Acid (up to 10%)	Fair	May cause slight surface discoloration or etching
- Phosphoric Acid (up to 30%)	Excellent	Strong resistance under typical conditions
Bases/Alkalis		
- Sodium Hydroxide (25%)	Excellent	Resistant to highly alkaline environments
- Potassium Hydroxide	Excellent	Handles prolonged exposure
Solvents		
- Ethanol	Good	Minimal effect on surface, but prolonged exposure can soften
- Acetone	Poor	Not recommended for direct or prolonged exposure
- MEK (Methyl Ethyl Ketone)	Poor	Can cause damage or softening of the surface
Oils and Fuels		
- Diesel Fuel	Excellent	No impact from fuel exposure
- Motor Oil	Excellent	High resistance to oil-based substances
Food Acids		
- Lactic Acid	Good	Minimal impact, suitable for food processing environments
- Citric Acid (5%)	Excellent	No significant degradation
Cleaning Agents		
- Bleach (Sodium Hypochlorite)	Good	Resistant to bleach solutions under normal cleaning conditions
- Ammonia-Based Cleaners	Excellent	No degradation or surface impact
Other Chemicals		
- Salt Solutions (NaCl)	Excellent	Handles salt and marine environments with ease
- Hydrogen Peroxide (up to 10%)	Good	Minor impact; higher concentrations may cause surface etching

Key Characteristics of Cycloaliphatic Epoxy:

- **Excellent Chemical Resistance** to acids and alkalis, particularly in lower to moderate concentrations.
- **Good Solvent Resistance**, though not suited for prolonged exposure to aggressive solvents like acetone or MEK.
- **Durable and UV Resistant**, making it an ideal choice for both indoor and outdoor flooring applications.
- **Non-porous Surface** for easy cleaning and maintenance, ensuring a long-lasting, protective barrier in industrial and commercial spaces.

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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 **25 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 MoistureContent	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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