

## | Introduction

Alka 404 is a Zinc Rich Epoxy Primer, which is a high-performance protective coating widely used to prevent corrosion on steel surfaces exposed to harsh environmental conditions. It consists of epoxy resin combined with a high concentration of metallic zinc dust, which provides excellent anti-corrosive protection through both barrier and cathodic protection mechanisms. This primer is commonly applied in heavy industrial sectors such as marine, oil and gas, power plants, bridges, pipelines, and structural steel fabrication.

The zinc particles in the primer act as sacrificial protection for the steel surface. When moisture or corrosive elements come into contact with the coated metal, the zinc corrodes preferentially instead of the steel, thereby preventing rust formation. This electrochemical protection makes zinc rich epoxy primer highly effective for long-term corrosion resistance, especially in coastal, humid, or chemically aggressive environments.

Epoxy resin in the formulation provides strong adhesion, mechanical durability, and chemical resistance. Once cured, the primer forms a hard and durable coating that bonds tightly to properly prepared steel surfaces. It also offers excellent compatibility with various intermediate and topcoat systems such as epoxy, polyurethane, and acrylic coatings.

Zinc Rich Epoxy Primer is valued for its durability, resistance to corrosion, and ability to extend the service life of steel structures. Due to its superior protective properties, it is considered one of the most reliable primers for industrial and heavy-duty protective coating systems.

## | Where it could be used.

- Structural steel
- Automotive components
- Industrial equipment
- Aluminium and galvanized surfaces
- Maintenance and repair applications

## | Benefits

- Excellent adhesion to steel substrates,
- Good anti-corrosive performance,
- Fast drying characteristics,
- Easy application by spray or brush,
- Available in bulk quantities.

## | How to Apply

### Surface Preparation

All surfaces must be clean, dry, and free from oil, grease, dust, rust, and other contaminants. Abrasive blasting to Sa 2 or Sa 2.5 is recommended where possible.

### Recommended Application Methods

- Conventional spray
- Airless spray
- Brush or roller for small areas and touch-up work
- Temperature: 10°C – 40°C
- Relative Humidity: Below 85%
- Thinner: Toluene / Xylene blend
- Equipment cleaning: Same as thinner

### Storage Conditions

Store in a cool, dry, and well-ventilated area away from direct sunlight and sources of ignition. Recommended storage temperature: 5°C – 35°C.

### Shelf life

12 months in unopened original containers under recommended storage conditions

### Health & Safety

Use only in well-ventilated areas. Wear appropriate PPE during application. Keep away from heat, sparks, and open flames. Refer to SDS before use.

## | Important Notes

- Do not add any water.
- Do not apply Alka 404 on any substrates where significant vapor pressure may occur.
- Always ensure good ventilation when using Alka 404 in a confined space.
- Freshly applied Alka 404 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.

# Alka 404

Zinc Rich Epoxy Primer



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

Property	Value
Appearance	matte / flat
Colours	Grey / Zinc Grey
Density	Approx. 1.2 – 1.4 g/cm <sup>3</sup>
Volume Solids	Approx. 55 – 70%
VOC Content	Complies with applicable industrial standards
Drying Time @ 25°C	Touch dry: 15 – 30 minutes
Recoat Time	30 – 60 minutes
Full Cure Time	5-7 Days
Adhesion	Excellent on properly prepared metal substrates
Corrosion Resistance	Good corrosion resistance with suitable topcoat systems

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

## | Contact us

**ALKA COATINGS / ABN: 70 652 323 487**

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