

FUERZA ACIKIF

TWO-COMPONENT CHEMICALLY CURED, HIGH-PERFORMANCE ACID-RESISTANT PROTECTIVE COATING

FUERZA ACIKIF is an advanced **two-component chemically reactive coating system** engineered to provide exceptional resistance against **highly aggressive acidic environments**. Upon curing, it forms a dense, chemically inert, and impermeable protective barrier capable of withstanding exposure to **virtually all inorganic and organic acids across a broad concentration range**, with the exception of **hydrofluoric acid**. Its superior chemical resistance makes it ideally suited for industrial facilities where continuous acid exposure or accidental chemical spillage is anticipated.

The formulation exhibits **excellent adhesion to both porous and non-porous substrates**, including cementitious and epoxy-based flooring systems. When mixed to form a homogeneous slurry and applied at a recommended thickness of **1.0–1.5 mm**, it produces a seamless, high-strength protective lining with outstanding bond strength, abrasion resistance, and long-term chemical durability. Following application, the system should be allowed to **cure for 7–10 days** to achieve optimum mechanical and chemical performance.

CHEMICAL RESISTANCE (Tested at 20°C)

When fully cured, **FUERZA ACIKIF** exhibits outstanding resistance to a wide range of aggressive chemicals and remains **unaffected** by exposure to:

- **Acetic Acid** – concentrations up to **20%**
- **Hydrochloric Acid (HCl)** – concentrations up to **35%**
- **Sulphuric Acid (H₂SO₄)** – concentrations up to **98%**
- **Orthophosphoric Acid (H₃PO₄)** – concentrations up to **70%**
- **Nitric Acid (HNO₃)** – concentrations up to **30%**
- **A broad range of alkalis and other industrial acids**, under normal service conditions.

TECHNICAL INFORMATION

Color:	Grey
Compressive strength:	350 kg/cm ²
Flexural strength:	75 kg/cm ²
Bond strength:	10 kg/cm ²
Water absorbtion:	1% by wt.
Max. temperature:	170° C
Setting time:	18-24 hours
Mix ratio by wt. sol to powder:	1.3

APPLICATIONS

- Designed for **acid-resistant protection** in environments requiring exceptional chemical resistance.
- Suitable for **chemical processing plants, dyestuff and pigment manufacturing facilities, rayon industries, steel processing plants, thermal power stations, fertilizer production units, petrochemical complexes, and food and pharmaceutical manufacturing facilities**.
- Recommended for the protection of **industrial floors, chemical drainage systems, storage and process tanks, reaction vessels, containment structures, and effluent treatment plants (ETPs)**.
- Ideal for concrete and cementitious surfaces exposed to **continuous chemical attack, acid spillage, and other aggressive industrial environments**.

METHOD OF APPLICATION

Surface Preparation:

Ensure that the substrate is **structurally sound, clean, dry, and free from dust, oil, grease, laitance, loose particles, and other contaminants**. The surface should be maintained at the recommended **ambient temperature** prior to application to ensure optimum adhesion and curing performance.

Mixing:

FUERZA ACIKIF shall be prepared by **mechanically blending the liquid component with the powder component** to produce a smooth, homogeneous, lump-free slurry. The recommended **mixing ratio is 1 part liquid to 3 parts powder by weight**, although slight adjustments may be made depending on ambient temperature and site conditions.

Using a **clean, dry, non-reactive mixing vessel**, place the required quantity of the liquid component first, then gradually introduce the powder while continuously mixing with a **low-speed mechanical mixer** until a uniform consistency is obtained. Prepare only the quantity of material that can be applied within the product's **20–30 minute working (pot) life**.

Application:

Apply the mixed coating uniformly over the prepared substrate using a **trowel, spatula, or other suitable applicator**, ensuring complete and continuous coverage. A slightly heavier application at the center of the treated area is recommended to eliminate **air entrapment** and ensure full contact with the substrate. During application and throughout the curing period, the coated surface shall be **protected from moisture, water ingress, dust, and other contaminants** that may adversely affect the setting, curing, and long-term performance of the coating system.

PACKAGING, STORAGE & SHELF LIFE

FUERZA ACIKIF is supplied in **20 kg sets**. Store both the **liquid and powder components** in their **original, tightly sealed containers** in a **cool, dry environment**, protected from direct sunlight, moisture, and excessive heat. Under recommended storage conditions, the **liquid component has a shelf life of 12 months** from the date of manufacture.

HEALTH & SAFETY

Wear appropriate **PPE**, including chemical-resistant gloves and safety goggles, during handling and application. Avoid contact with **skin and eyes**. In case of accidental contact, rinse immediately with plenty of clean water and seek medical attention if necessary. Product recommendations are based on laboratory testing and field experience; however, application conditions are beyond our control, and users should verify the product's suitability for the intended use.

