



ELEMENTS[®]
QUÍMICA APLICADA

e5 SUSTINER AN

**GREEN COVENANT WITH
OUR PLANET**

Description

e⁵ Sustineri AN is an admixture for concrete production. It's a high tech. water reducer and set retardant manufactured only by **Element5**.

It's manufactured with resilient raw materials, that are designed, modified and reused to break the flocculating effect of cement particles., as the cement enters in contact with water. It's produced with biopolymer dispersants, retardants, and rheology modifiers.

In this manner, due to the nature of its components, this product is high tech. and friendly with the environment.

With its special formula, it improves cement's hydration. This is evident by the mechanical strength increases in concrete. The increases are greater than those resulting from the use of traditional admixtures of the same type.

There are aggregates and cements in the market that, in combination with some admixtures, generate high air entrainment in concrete. This lowers the properties of the concrete used. To avoid these problems we recommend the use of this product.

e⁵ Sustineri AN allows water reductions, and it increases the mechanical strengths of concrete in such a way that it widely complies with the requirements of ASTM C-494 as well as those of NMX-C-255-ONNCCE.

Setting times can be modulated as a function of environmental conditions and the type of materials used.

This type of product, by being formulated with a considerable concentration of biopolymers, helps in the mitigation of the carbon footprint. Hence the descriptive name "sustineri," that means sustainable.



Benefits

Using **e⁵SustineriAN** in concrete:

- Helps to retain concrete mix consistency for a longer time.
- The raw materials used to produce this admixture help to reduce the carbon footprint.
- It allows longer transportation time and greater workability.
- Allows concrete production in warm climates.
- It significantly increases mechanical strengths of concrete.
- It allows greater control of setting times.
- Improves the rheological properties of concrete.
- Reduces concrete's permeability.
- Reduces the water / binding materials ratio.
- It increases concrete's durability.
- Reduces the per m³ manufacturing cost of concrete.

Presentation

- 18 L pail
- 200 L drum
- 1,000 L tote
- Bulk

Useful life: 12 months in its original container

Principal Applications

- Conventional concretes
- Pumpable concretes
- Structural concretes

Technical Information

- Specific gravity: 1.22
- Physical appearance: Dark brown liquid



Directions for use

For better results we recommend running lab. tests with the job materials. This allows making all the necessary adjustments in the concrete mix. These can be: appearance, workability, consistency, air content, yield, setting times and the admixture dosage.

Then, it's important to repeat these tests at an industrial level, under real job conditions, (moisture, temperature, time to transport fresh concrete, etc.), for the sake of making the final adjustments.

Add **e5 SUSTINERI AN** along with 80 % of the mix water during the preparation of the concrete mix. Load the aggregates and the cement following the established order. Once all the materials have been loaded, including the remaining 20% of the mixing water, allow the materials to mix one minute for each m³ of concrete at mixing speed.

Never add the admixture to the cement, without its prior initial hydration, or directly on the aggregates.

Dosage can vary between 4 and 11 mL / kg of cement. The dose will depend on the concrete mix design.

When used in combination with integral waterproofers, it is necessary to check the air content and the setting times in the concrete mix.

Consult with your **Element5 Integral Solutions Advisor (Asesor de Soluciones Integrales de Element5)** for the preparation of durable concretes with an important economic benefit.

For any doubts or comments on the use of this product, contact our **Element5 Technical Support Department (Departamento de Apoyo Técnico)**.



Cautions

- No Do not allow the product to freeze.
- Always keep the product in its original container.
- Never add admixture along with the aggregates or directly on the cement, without its prior initial hydration. These actions will decrease the admixture's efficiency.
- In the event of any important variation in materials (change of aggregates, cement, etc.), it is necessary to make the required adjustment to the established dosifications.
- The overdosage of admixture can cause delays in the cement's speed of hydration and excessive air contents.

Element5 Química Aplicada S.A. de C.V. garantiza que el producto cumple con la calidad establecida y está exento de problemas de fabricación. Cuando el producto se encuentra fuera de la fecha de caducidad y una vez manipulado por el usuario, **Element5 Química Aplicada S.A. de C.V.** no extiende ningún tipo de garantía adicional, ya que no tenemos control de variables presentes en la aplicación o manipulación del producto. El presente documento sólo contiene recomendaciones generales. La interpretación técnica que se derive en la especificación de nuestros productos es responsabilidad total del usuario. No se contempla lo que no está escrito en este documento y garantía. Si es necesario conocer a detalle algún dato referente a los productos o a las recomendaciones de las cuales se desprenden los procedimientos enunciados, contactar al Departamento de Soporte Técnico de **Element5 Química Aplicada S.A. de C.V.** así como visitar nuestra página web, donde se pone nuestro aviso de privacidad.

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