



**ELEMENTS**<sup>®</sup>  
QUÍMICA APLICADA

**e<sup>5</sup>**  
**NOVUS MG 1 ++**  
**AIR**

**WATER REDUCING  
ADMIXTURE**

## DESCRIPTION

**e<sup>5</sup>NOVUS MG 1 ++ AIR** is a high tech water reducing admixture, especially designed to break the flocculating effect of the cement particles upon being in contact with water.

With its special formula, it improves cement hydration. This is shown in mechanical strength increases in concrete. These increases are greater than those shown by traditional admixtures of the same type.

The **e<sup>5</sup>NOVUS MG 1 ++ AIR** Widely cumplies as a type A admixture, according to NMX C-255-ONNCCE y ASTM C-494.

## BENEFITS

The use of **e<sup>5</sup> NOVUS MG 1 ++ AIR** in concrete:

- Increases in a controlled manner the air content in the mix to improve its workability.
- Increases mechanical strength.
- Improves rheological properties.
- It allows adequate transportation.
- Reduces permeability.
- Reduces water to binding materials ratio
- Reduces manufacturing cost of m<sup>3</sup>
- Helps binding of concrete in cold climates

## TECHNICAL INFORMATION

- Specific gravity: 1.21
- Phisical appearance: dark brown liquid.

## PRESENTATION

- 18 L pail.
- 200 L drum
- 1000 L tote
- Bulk

Useful life: 12 months in its original container

## PRINCIPAL APPLICATIONS

**e<sup>5</sup>NOVUS MG 1 ++ AIR** can be used for mixing the following concretes:

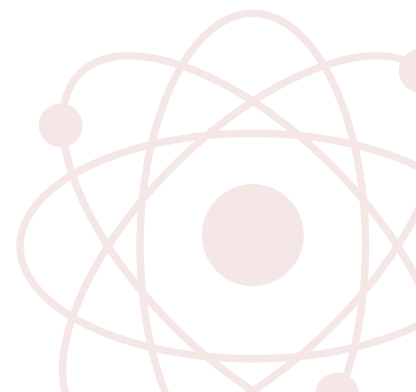
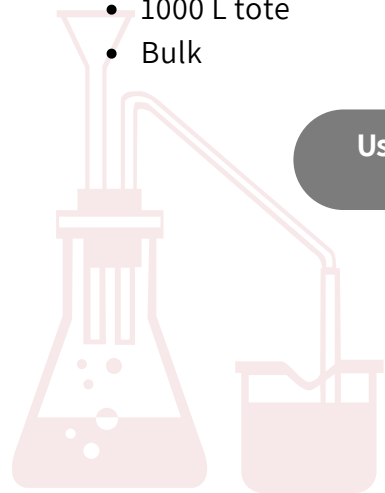
- Conventional concrete.
- Pumped Concrete.
- Concretes with crushed agreggates and sands with high finesse modulus.

## 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 admixture dosage.

Then it is important to run duplicate tests at an industrial level, under real site conditions where concrete will be used (moisture, temperature, concrete setting times, etc.), for the purpose of making the final adjustments.

Add **e<sup>5</sup> NOVUS MG 1 ++ AIR** along with 80 % of the mix water during the concrete mixing. Load aggregates and cement according to the stablished order.



Once all the materials, including the remaining 20 % of the mix water, allow one minute mixing for each cubic meter of concrete at mixing speed.

Dosages can vary from 4 to 11 mL/kg of cement. This will depend on the concrete design to be mixed.

An overdosage to the established dosifications can result in a delay in the hydration process and undesired air content.

when the admixture is used in combination with integral water proofers, it is necessary to check air content and setting times in the concrete mix.

Consult with your **Element5** technical advisor for durable concrete production with an important economic benefit.

For any doubts on the use of the product, please contact our **Technical Support department** at **Element5**.

## CAUTIONS

- Do not allow freezing of the product.
- Never add admixtures with aggregates or cement, without its prior initial hydration, as this will decrease the admixture's efficiency.
- in the event of any important variation of the materials (change of aggregates or cement etc.), or atmospheric conditions it is necessary to make the required adjustments in the established dosage.
- Admixture overdosage can delay the speed of cement hydration and excessive air content.

- Run tests in combination with other admixtures, to check for synergy behavior, specially in air contents and setting times.
- it is not recommended for concretes mixed for industrial floors.
- Keep the product always sealed in its original container, away from ingredients that might contaminated. Do not harm the containers used for this product, as product overhauls might occur. Consult the MSDS before handling the product.

### **Element5 Química Aplicada S.A. de C.V.**

Guarantees that the product complies with the established quality and it is exempt of manufacturing problems.

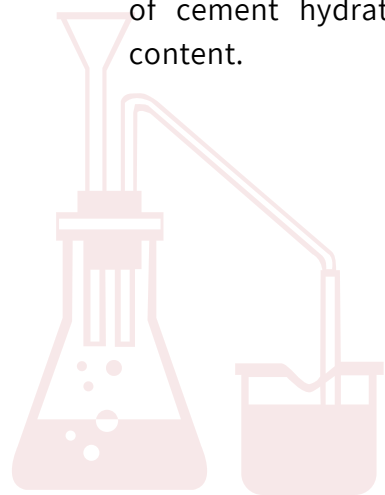
When the product is outside its established expiration date and handling of the product by the user, **Element5 Química Aplicada S.A. de C.V.** does not provide any additional warranty, given that we do not have control of present variables in the application or handling of the product.

The present document contains only general recommendations.

Technical interpretation deriving in the specification of our product is the users whole responsibility. What is not included in this document and Warranty is not covered.

If it's necessary to know something in detail related to the products or recommendations based on the specified procedures, please contact our **Technical Service** at **Element5 Química Aplicada S.A. de C.V.** Visit our web site, where you can find our privacy statement.

public validity:  
February 2024





**ELEMENTS<sup>®</sup>**

QUÍMICA APLICADA

**División Químicos para la Construcción**

Tel. +52 55 2484 2236

[contacto@element5.mx](mailto:contacto@element5.mx)  
[www.element5.mx](http://www.element5.mx)

Carr. Lago de Guadalupe No. 127 Int. 804  
Margarita Maza de Juárez, Atizapán de  
Zaragoza, Estado de México, C.P. 52926.