

# e<sup>5</sup> AWA DRy

UISCOSITY MODIFYING ADMIHTURE FOR CONCRETE CAST UNDERWATER

#### DESCRIPTION

e<sup>5</sup> AWA Dry is a powder admixture for viscosity modification of concrete mixes. It is formulated with latest generation polymers.

Different from traditional systems, it is designed to prevent the fine aggregate and cement loss during underwater concrete casting.

**e<sup>5</sup> AWA Dry** fundamentally reacts with the mix water, by changing its viscosity. In consequence it minimizes washout of the concrete.

### BENEFITS

The use of **e<sup>5</sup> AWA Dry** in concrete allows:

- It increases the viscosity of the mixes
- It considerably reduces the loss of cementing paste in the fresh state upon making contact with water
- It improves rheologic properties
- It reduces seggregation of high flow mixes
- It improves water retention
- It reduces bleeding
- It reduces the cost of implementing other methods for underwater concrete casting

# **TECHNICAL INFORMATION**

• Physical appearance: beige color powder

# PRESENTATION

• 7 sack system, with 500 grams each

Useful life: 6 months in its original container and in dry conditions

#### PRINCIPAL APPLICATIONS

**e<sup>5</sup> AWA Dry** can be used for the production of the following concretes:

- Concrete cast under water
- Concrete cast with Tremie pipe
- Concrete with high consistency as flowable concrete
- Self-consolidating concrete
- Concretes or cement systems that are selfleveling
- Excellent to improve paste adherence in permeable concretes
- Concretes for columns and Milan walls in cementig
- Concrete with crushed aggregates and with high finenes sands
- Light weight concrete, and fluid fills

# DIRECTIONS FOR USE

For better results, we recommend running lab tests with the job materials, admixtures, and the type of cement used. This allows performing all the necessary adjustments in the concrete mix according to each project specification.

The dosage of  $e^5$  AWA Dry can vary from 1 kg to 0.400 kg/m<sup>3</sup> and it will depend on the mix design to be prepared.

Dilute **e<sup>5</sup> AWA Dry** with 80% of the mix water, and the amount of admixture determined during the tests. (When polycarboxilates based admixtures are used it is necessary to add 50% of the total volume of admixture, along with 80% of the mix water and then with the remaining 20%, then add the other 50%).

Add the aggregates and the cement according to the established order. Once all the materials have been loaded, including the remaining 20% of the remaining water, alow mixing during 1 minute for each m<sup>3</sup> of concrete at maximum mixing speed. If it is necessary to increase the consistency of the mix use fluidefiying admixtures (type F2).

Consult your **Element5 Integral Solutions Advisor** for the preparation of durable concretes along with economic benefits.

For any questions of the use of the product, please contact the **Element5 Technical Support** Department.

### CAUTIONS

- Admixture overdosage can cause and excess in the air content
- Perform tests in combination with other admixtures to check for synergies, especially in the air content and setting times
- It is compatible with all other admixtures
- In the event of any important variation in the materials (change of aggregates, cement etc,), it's necessary to make the required adjustments in the dosages used
- Do not allow freezing or hydration of the product
- Never add admixture to the cement without its prior hydration. Do not add with the aggregates, as this will lower the efficiency of the admixture
- For better results we recommend preparing lab tests with the job materials. This allows making all the necessary adjustments: such as air content, yield and setting times and the admixture dosage.

Then it is important to repeat the tests under real job conditions (moisture, temperature, time required to deliver concrete etc.), this allows making the final adjustments

- When it is used with integral waterproofers it is necessary to check air content, setting times in the concrete mix
- Always keep the product closed in its original container, away from agents that could contaminate it. Do not damage the containers containing the product, as this may cause spillage. Consult the Safety Data Sheet (MSDS) before handling

**Element5 Química Aplicada S.A. de C.V.** guaranties that the product meets the stablished quality and that it is exempt of fabrication problems.

When the product is outside it's stablished life, and it has been handled by the user, **Element5 Química Aplicada S.A. de C.V.** does not extend any type of additional warranty, as we have not control the present variables in the application or handling of the product.

The present document only contains general recommendations.

The technical interpretation that derives in specifications of our product is the user's responsibility.

That that is not written in this document and warranty is not contemplated.

If it's necessary to know in detail any data in reference to product or recommendations contact our **Element5 technical support**. Visit our website where our privacy statement is available for you.

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