**ESA.W201**

High range water- reducer concrete admixture

ESA.W201 is used as a highly effective water-reducing agent and superplasticizeing for the production of high workability concrete on the bases of Naphthalene sulfonate for minimum water to cement ratio at normal conditions.

**Applications**

* High fluidity and increase concrete workability
* Produces concrete with crushed aggregates
* High-pressure concrete with reducing water to cement ratio
* Slender components whit densely packed reinforcement
* Flooring concrete

**Features**

* Reducing water consumption in concrete up to 25%
* Increasing initial and final strengths
* Use simultaneously with other pozzolans , Fly ash and slag
* Decreasing permeability
* Decreasing concrete’s porosity
* Accelerate concreting and reducing operating cost
* No change the setting time of concrete
* Improves adhesion between the internal components of concrete
* prevents bleeding in concrete

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| **Technical properties** |
| **liquid** | **state** |
| **Dark brown** | **color** |
| **1/18**$\pm $**0/02 g/cm3** | **Specific gravity(25oC)** |
| **1**$\pm $ **8** | **pH** |
| **-2 oC** | **Freezing temperature** |
| **Not containing Chloride ion (BS 5075)** | **Chloride ion** |

**With accordance to these standards**

**ASTM C 494- TYPE F**

**EN 934-2 –Table 3.1 /3.2**

**Dosage**

For The optimum dosage of ESA.W201 advise to carry out trial mixes. It is recommended to perform some tests on fresh and hardened concrete’s properties such as fluidity, staying fluid, setting time, initial and final strength with your materials in your environment. In generally we suggest a value between 0.5-1.5 percent by weight of cement.

**How to use**

* ESA.W201 can be added to freshly mixed concrete or mixed with water with any ratio and then added to concrete.( on the batching plant or on site into the truck mixer )
* Do not use ESA.W201 directly to cement mixtures together with dry aggregates.

 **Safety points**

* ESA. W201 isn’t in the category of hazardous material. And causes no harm to the body or the environment. However, wash with water before drying if contacted with skin.
* If contacted with eyes or swallowed immediately wash with a lot of water and consult a doctor.