

FLUIDING M1M

Concrete and mortar plasticiser / set retarder
In compliance with: EN 934-2: T10

FIELD OF APPLICATION

Preparation of "standard" concrete mixtures intended for the execution of various works in constructions (foundation and other underground structures, industrial floors, RC columns, beams and floor structures, concrete pavement structures, hydraulic structures, retaining walls, etc.).
Preparation of concrete mixtures intended for transport and applied by using a pump;
Concreting of structural elements with heavily reinforced concrete sections;
Concreting under high ambient temperatures;
Concreting of massive concrete sections where there is risk of unintended consequences caused by exothermic processes in concrete;
Preparation of cementitious injection grouts;
Preparation of economical concrete mixtures with optimum ratio between components and concrete performance;

PROPERTIES

- Enables water reduction of up to 15%;
- Enables long-distance transport and extended placement time of concrete (up to 90 minutes)
- Improves the workability of concrete without further addition of water;
- Facilitates the placement and cure of concrete under high ambient temperatures;
- Increases concrete compactness and water-tightness;
- Improves physical and mechanical properties of concrete (increased final strength properties);

TECHNICAL FEATURES

PROPERTY	METHOD	DECLARED VALUE
Appearance	Visual	Brown liquid
Density (at 20°C)	ISO 758	(1.15±0.03) g/cm ³
Chloride content	EN 480-10	≤0.1%
Alkali content	EN 480-12	≤5.5%
pH value (at 20°C)	ISO 4316	6.5±1.0

DOSAGE AND PERFORMANCE:

The optimum dosage of FLUIDING M1M ranges between 0.3 and 1.0% of the amount of cement in the concrete mixture. Water reduction of up to 15% is achieved when using such a dosage (Diagram 1). Thereby, strength properties of concrete are increased at day 7 and 28 respectively (Diagram 2).

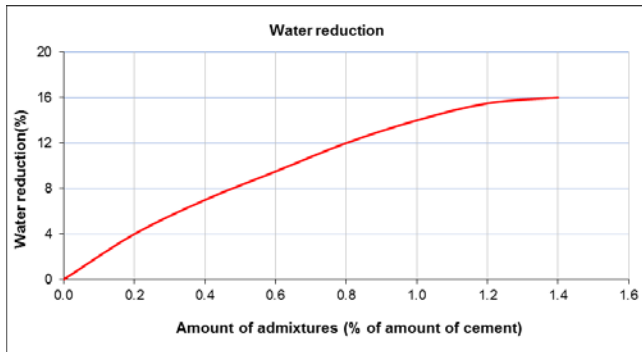


Diagram 1

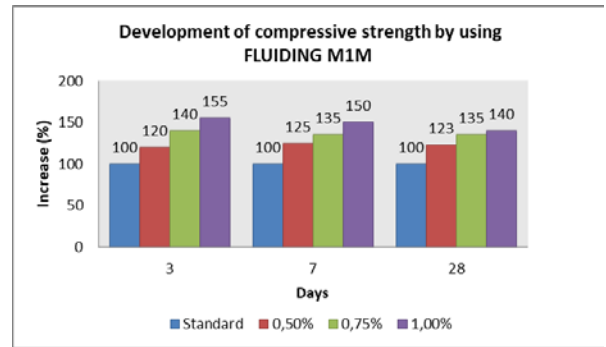
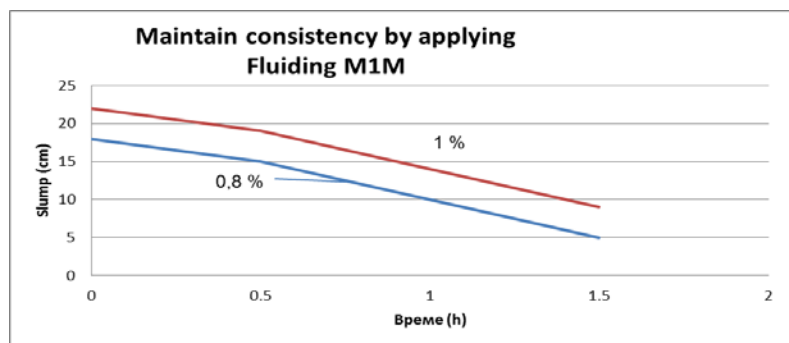


Diagram 2

Reference concrete I according to EN 480-1 by using CEM I 42.5R

The optimum dosage of FLUIDING M1M is best determined by conducting laboratory or industrial testing.

Under high ambient temperatures, or in the event that the manufacturing, transport and placement of concrete takes more than 90 minutes, the recommended dosage of FLUIDING M1M is over 0.8%, whereas fresh concrete should have a higher slump class (S3 or S4). In addition, it is recommended to add USPORUVAC D2 (RETARDER D2) – set retarding admixture – to the concrete mixture.



Reference concrete IV according to EN 480-1 by using CEM I 42.5R

Dosing of admixtures is carried out manually or automatically during the manufacturing of the concrete. Best effects are achieved when FLUIDING M1M is added together with the last 20-30% of water, in the mixture of aggregate, cement and 80% of water. It is recommended that the mixing of fresh concrete that contains FLUIDING M1M admixture should not be shorter than 90 seconds.

Effects of overdose: Overdose of FLUIDING M1M can lead to segregation and delayed set time

COMPATIBILITY

If two or more admixtures are planned to be used in the concrete mixture, it is necessary to carry out tests in advance. Different admixtures are to be administered individually, meaning they should not be mixed together before adding them to the concrete mixture. FLUIDING M1M is compatible with all types of Portland cement, including sulfate-resisting cements.


PACKAGING

Plastic cans: 5 и 24 kg
Drums: 240 kg
Containers: 1200 kg

STORAGE

In the original packaging at temperature between 5°C and 35°C. Shelf life: 12 months.

CE MARKING

 2032
ADING AD Skopje Novoselski pat (ulica 1409) no. 11, 1060 Skopje, Macedonia 08 2032-CPR-08.40B EN 934-2:2009+A1:2012
FLUIDING M1M Concrete admixture, plasticiser/ set retarder EN 934-2:T10 Maximum chloride ion content: 0.1% Maximum alkali content: 5.5% Contains only components from Corrosive: EN 934-1:2008, Annex A.1

Health hazards: Fluiding M1M does not contain toxic materials. Nevertheless, avoid contact of the product with skin and eyes and avoid swallowing. In case of contact with skin or eyes, rinse it immediately with clean running water. If swallowed, seek medical assistance. Additional information are provided in the Safety Data Sheet of the product.

Fire: Fluiding M1M is a non-flammable liquid. Additional information are provided in the Safety Data Sheet of the product.

Cleaning and disposal: Loose residues of Fluiding M1M should be cleaned with water. Old and used packaging should be disposed of in accordance with local rules and regulations for that type of waste. Additional information are provided in the Safety Data Sheet of the product.