

FLUIDING M1M

Concrete and mortar plasticizer / 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 at 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 ration 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 (Diagram1). Thereby, strength properties of concrete are increased at day 7 and 28 respectively (Diagram2),

The optimum dosage of Fluiding M1M is best determined by conducting laboratory or industrial testing,

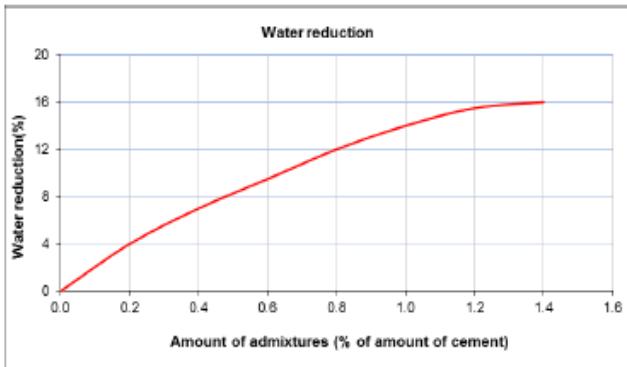


Diagram 1

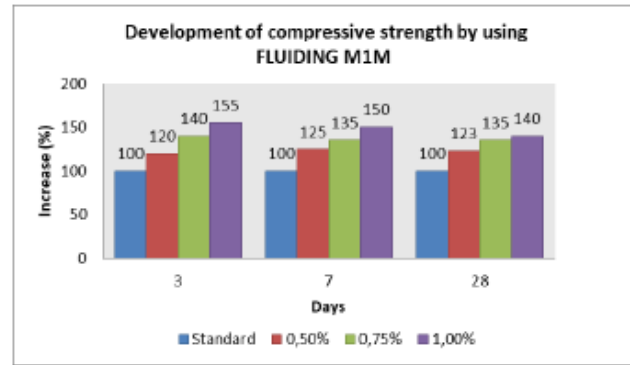


Diagram 2

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

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 Usporovac D2 (Retarder D2) – set retarding admixture – to the concrete mixture.

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

CE 2032	
ADING AD Skopje, Novoselski pat (ul 1409) br.11 1060 Skopje, North Macedonia 08 GAAC001/5 EN 934-2:2009+A1:2012 FLUIDING M1M Set retarding/water reducing/plasticizing admixture for concrete EN 934-2:T10	
Chloride ion content	≤ 0,1% by mass
Alkali content	≤ 5,5% by mass
Corrosion behaviour	Contains components only from 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, clean it immediately with running water. If swallowed, ask for 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 in accordance with local rules and regulations for that type of waste. Additional information are provided in the Safety Data Sheet of the product.