

SUPERFLUID M1

Superplasticizer / set retarder for concrete and mortar

In compliance with: EN 934-2:T11.1 u T11.2

FIELD OF APPLICATION

Preparation of concrete with high strength characteristics;
Preparation of concrete with high class of consistency;
Preparation of concrete with considerably reduced W/C – ratio;
Preparation of concrete mixtures for transport up to 90 minutes and placing with pump;
Concreting in conditions of high ambient temperatures;
Concreting of massive concrete sections, with risk of negative effects due to the increased temperature caused by exothermic processes;
Concreting of densely reinforced sections;
Preparation of concrete with high degree of waterproofing and resistance to atmospheric and other influences and aggressions;
Preparation of cement injection and grouting mixtures;

PROPERTIES

- Reduction of water up to 20%;
- Maintaining the workability of concrete up to 90 minutes;
- Improves the workability of concrete without further addition of water;
- Improves application of concrete in conditions of high ambient temperatures;
- Improves the compactness of the concrete;
- Improves the physical and mechanical characteristics of the concrete (increased early and final strength);
- Increases the water-tightness of concrete
- Enables re-vibration of concrete mixtures

TECHNICAL FEATURES

PROPERTY	METHOD	DECLARED VALUE
Appearance	Visual	Brown liquid
Density (at 20°C)	ISO 758	(1.2±0.03) g/cm ³
Chloride content	EN 480-10	≤0,1%
Alkali content	EN 480-12	≤6,5%
pH value (at 20°C)	ISO 4316	5,5±1,0

DOSAGE AND PERFORMANCE:

The optimum dosage of SUPERFLUID M1 ranges between 0,5 and 1,5% of the amount of cement in the concrete mixture. In exceptional cases, where extreme strength characteristics of concrete are required, dosing of SUPERFLUID M1 can range up to 2% of the mass of the cement. With such dosage, water reduction is achieved over 20%, thus increasing of early and final strength of concrete.

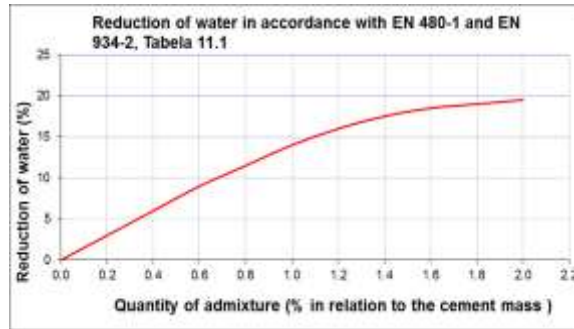


Diagram 1

The optimum dosage of SUPERFLUID M1 is best determined by preliminary laboratory or industrial tests. In conditions of high ambient temperatures, or in cases where the production, transport and concreting last more than 90 minutes, it is recommended additional dosing of retarding admixture for concrete USPORUVAC D2.

Dosing of admixtures is carried out manually or automatically during the production of the concrete. Best effects are achieved when SUPERFLUID M1 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 with addition of SUPERFLUID M1 admixture should not be shorter than 90 seconds.

Effects of overdose: Overdose of SUPERFLUID M1 can lead to segregation of fresh concrete.

COMPATIBILITY

SUPERFLUID M1 is compatible with all admixtures from the product range of ADING, except for polycarboxilate - based admixtures. If in the concrete mixture two or more admixtures are used, it is necessary to perform preliminary tests. Different admixtures are dosed separately i.e. they are not intermixed with each other prior to insertion into the concrete mixture. SUPERFLUID M1 is compatible with all types of Portland cement, including sulfate resistant cements.


PACKAGING

Plastic cans: 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 (ul 1409) br.11 1060 Skopje, North Macedonia 08 GABB001/6 EN 934-2:2009+A1:2012 SUPERFLUID M1 Set retarding/ high range water reducing/superplasticizing admixture for concrete EN 934-2:T11.1&T11.2	
Chloride ion content	≤ 0,1% by mass
Alkali content	≤ 6,5% by mass
Corrosion behaviour	Contains components only from EN 934-1:2008, Annex A.1

Health hazards: Superfluid M1 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: Superfluid M1 is a non-flammable liquid. Additional information are provided in the Safety Data Sheet of the product.

Cleaning and disposal: Loose residues of Superfluid M1 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