

# SUPERFLUID M1M

Superplasticizer / set retarder for concrete and mortar In compliance with: EN 934-2:T11.1 u T11.2

## **FILED OF APLICATION**

Preparation of concrete with high final 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 120 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 exothermics 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 mixtures;

## **PROPERTIES**

- Reduction of water up to 20%;
- Maintaining the workability of concrete up to 2 hours
- Improves the workability of concrete without further addition of water;
- Improves application of concrete in conditions of high ambient temperatures:
- Improves the compactness and watertightness of concrete;
- Improves the physical and mechanical characteristics of the concrete (increased initial and final strength properties);
- Increases waterproofing of concrete;
- Enables re-vibration of concrete mixtures;

## **TECHNICAL FEATURES**

PROPERTY	METHOD	DECLARED VALUE
Appearance	Visual	Brown liquid
Density (at 20°C)	ISO 758	(1.16±0.03) g/cm2
Chloride content	EN 480-10	≤0,1%
Alkali content	EN 480-12	≤6,5%
pH value (at 20°C)	ISO 4316	6,5±1,0

## **DOSAGE AND PERFORMANCE:**

The optimum dosage of SUPERFLUID M1M ranges between 0,8 and 1,5% of the amount of cement in the concrete mixture. In exceptional cases, where the achievement of extreme strength characteristics of concrete is required, dosing of SUPERFLUID M1M can range up to 2% of the mass of the cement.

Page 1 of 3







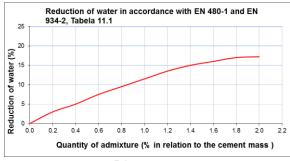


Diagram 1

The optimum dosage of SUPERFLUID M1M is best determined by conducting laboratory or industrial testing. Dosing of admixtures is carried out manually or automatically during the production of the concrete. Best effects are achieved when SUPERFLUID 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 with addition of SUPERFLUID-M1M admixture should not be shorter than 90 seconds.

Effects of overdose: Overdose of SUPERFLUID M1M can lead to segregation of fresh concrete and delayed set time.

# **COMPATIBILITY**

SUPERFLUID M1M is compatible with all admixtures from the product range of ADING, except for polycarboxilate - based admixtures. If two or more admixtures are planned to be used in the concrete mixture, 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 M1M is compatible with all types of Portland cement, including sulfate resistant 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...

Page 2 of 3





## **CE MARKING**



ADING AD Skopje, Novoselski pat (ul 1409) br.11 1060 Skopje, North Macedonia

14

GABF001/5

EN 934-2:2009+A1:2012

## **SUPERFLUID M1M**

Set retarding/high range water reducing/superplasticizing admixture for concrete

EN 934-2:T11.1&T11.2

Chloride ion content  $\leq$  0,1% by mass Alkali content  $\leq$  6,5% by mass

Corrosion behaviour Contains components only from EN 934-1:2008, Annex A.1

<u>Health hazards:</u> Superfluid 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: Superfluid M1M is a non-flammable liquid. Additional information are provided in the Safety Data Sheet of the product.

<u>Cleaning and disposal:</u> Loose residues of Superfluid 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.

Page 3 of 3





