

# SUPERFLUID-M1

Superplasticizer for concretes and mortars, with a high degree of water reduction (Water-reducing admixture) and consistency keeper up to 2 hours In compliance with: EN 934-2 (Table11.1 and 11.2); ASTM C494 type G; BS5075 part 3

# Field of application:

For concretes where it is necessary to reduce the quantity of water for achieving higher strengths, and at the same time to enable and keep the consistency from 60 to 120 minutes, in concreting massive concrete cross sections (dams, retaining walls, foundations), thus eliminating the danger of negative effects due to the increased exothermics, for concretes demanding revibration and cast concretes, for concreting at high temperatures, for concreting where particular conditions for quality are required (increased resistance to wear and abrasion, to aggressive environments, increased watertightness, resistance to frost etc).

## **Properties:**

- Reduction of water up to 20%;
- Maintaining the consistency up to 2 hours;
- Improves the compactness of concrete;
- Improves the workability of concrete without extra addition of water;
- Enables revibration of concrete mixtures;
- Increases the early and final strengths of concrete;
- Increases the watertightness of concrete;
- Enables improved surface finishes for concrete surfaces;
- Does not contain chlorides;

Reduction of water in accordance with EN 480-1 and EN 934-2. Table 11.1 (%) Reduction of water 25 20 15 10 5 0 0,0 0,2 0,4 0,6 0,8 1,2 1,6 1,8 2,0 1,0 1,4 Quantity of admixture (% in relation to the cement mass)

Maintaining consistency in compliance with EN 480-1 and EN 934-2, Table 11.2



## **Technical features:**

Туре:	Naphtalene ligno sulphonate
Appearance:	brown liquid
Dry substance:	40,0±2,0%
Bulk density:	1,20±0,03 g/cm <sup>3</sup>
Chlorides content:	none
Alkali content:	<5,5%
pH-value:	7,5±1,0

# Dosing:

Optimum dosing of Superfluid-M1 is best determined by preliminary tests at that employing the materials and conditions which would occur in practical use of the concrete and admixture in a structure.

Dosing is 0,5-2,0% by weight in relation to the cement mass. The addition of admixture is performed manually or mechanically. The best results are achieved when Superfluid-M1 is added into the water required for the preparation of concrete. Mixing time duration of the fresh concrete mixture containing admixture, should be extended by 50-100% in relation to mixing time duration for concretes without admixture.



#### Effect due to overdosing:

The increased dosing could considerably delay the mixing time for concrete. It is particularly demonstrated when using Portland cements with additives.

## **Compatibility:**

Superfluid-M1 is compatible with all admixtures of ADING's portfolio of products, except for polycarboxilate-based admixtures. If the concrete mixture uses two or more admixtures, it is necessary to perform preliminary tests. Different admixtures are batched separately i.e. are not intermixed with each other prior to insertion into the concrete mixture.

Superfluid-M1 is usable with all types of Portland cements, also including sulphate resistant cements.

#### Packing:

plastic cans:	5, 12 and 25 kg.
drums:	240 kg.
containers:	1200 kg.

#### Storage:

In original packing, at a temperature from 5°C to 35°C and protected against direct influence of sunbeams. Shelf life: 12 months.

Health hazard: Superfluid-M1 does not contain toxical substances; nevertheless, it is necessary to take care not to come to contact with skin, eyes or not to be swallowed. In case of splashing on the skin or in the eyes, it is necessary to rinse with pure flowing water. If it has been swallowed, it is necessary to ask for medical assistance Fire:

Superfluid-M1 is a non-flammable liquid.

Cleaning and discarding: Cleaning of the Superfluid-M1 residues is by using water. The old and used packing should be discarded in accordance with the local relevant regulations for that kind of waste

#### **ADING**

Novoselski pat bb, 1000 Skopje, R.Macedonia, ading@ading.com.mk, Tel: ++ 389 / 02 2034 840, 2034 822, Fax: ++ 389 / 02 2034 821

