

# SUPERFLUID

*Superplasticizer for concrete and mortar*  
*In compliance with: EN 934-2:T3.1 u T3.2*

## FILED OF APLICATION

Preparation of concrete with high early and final strength characteristics  
Preparation of concrete with high class of consistency  
Preparation of concrete with considerably reduced W/C - ratio  
Concreting of heavily reinforced concrete sections  
Preparation of pumped concrete, concrete with a high resistance to water ingress and atmospheric and other influences and aggressions  
Preparation of injection and grouting mixtures

## PROPERTIES

Reduction of water up to 20%  
Increases the early and final strengths of concrete;  
Improves the workability of concrete without extra addition of water;  
Improves application and the compactness of the concrete;  
Increases waterproofing of concrete;  
Improves the physical and mechanical characteristics of the concrete

## TECHNICAL FEATURES

PROPERTY	METHOD	DECLARED VALUE
Appearance	Visual	Brown liquid
Density (at 20°C)	ISO 758	(1.18±0.03) g/cm <sup>2</sup>
Chloride content	EN 480-10	≤0,1%
Alkali content	EN 480-12	≤6,5%
pH value (at 20°C)	ISO 4316	6,0±1,0

## DOSAGE AND PERFORMANCE:

Optimum dosage of SUPERFLUID ranges between 0,3 and 1,0% of the amount of cement in the concrete mixture. In exceptional cases, where extreme strength characteristics of concrete are required, dosing of SUPERFLUID can range up to 2% of the mass of the cement. With this dosage, water reduction can reach up to 20% (Diagram1), thus early and final strengths of concrete are increased accordingly.

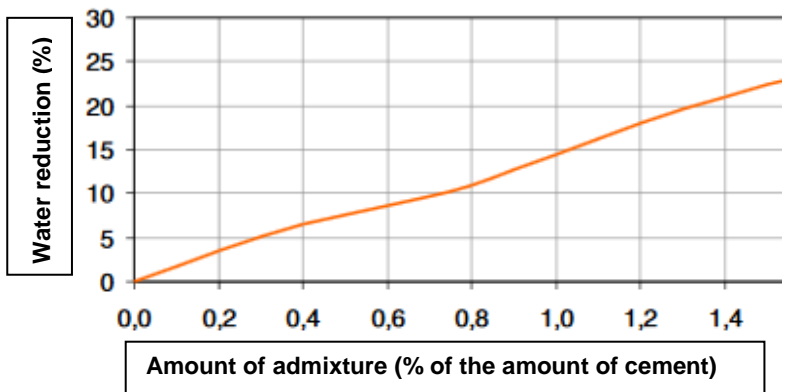


Diagram 1

The optimum dosage of SUPERFLUID 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 60 minutes, in the concrete mix instead of SUPERFLUID, it is recommended to use SUPERFLUID M1 or SUPERFLUID M1M, or to use additional dosage 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 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 admixture should not be shorter than 90 seconds.

## COMPATIBILITY

SUPERFLUID is compatible with all admixtures from the product range of ADING., except with polycarboxilate – based admixtures. If in the concrete mixture two or more admixtures are used, it is necessary to perform preliminary tests. Different admixtures are added in concrete mixture separately i.e. are not intermixed with each other prior to insertion into the concrete mixture. SUPERFLUID is usable with all types of Portland cements, also 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..

## CE MARKING

	
2032	
<b>ADING AD Skopje</b>	
<b>Novoselski pat (street 1409)No.11, 1060</b>	
<b>Skopje, Macedonia</b>	
<b>08</b>	
<b>2032-CPR-08.40B</b>	
<b>EN 934-2:2009+A1:2012</b>	
<b>SUPERFLUID</b>	
<b>High range water reducing/ superplasticizing admixture</b>	
<b>EN 934-2:T3.1&amp;3.2</b>	
<b>Maximum chloride ion content:</b>	<b>0.1%</b>
<b>Maximum alkali content</b>	<b>6.5%</b>
<b>Corrosion behavior:</b>	<b>Contains components only from EN 934-1:2008, Annex A.1</b>

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

**Cleaning and disposal:** Loose residues of Superfluid 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.