



# CEMENTOL<sup>®</sup> ZETA PLUS

**Superplasticizer, SIST EN 934-2: T 3.1 / 3.2  
by (0,7– 1,4)%**

**Plasticizer, SIST EN 934-2: T 2  
by (0,3 – 0,6)%**

## FIELD OF APPLICATION

**Cementol Zeta PLUS** is a modified new-generation superplasticizer. Its composition enables the preparation of durable concrete of all types, it is particularly suitable for the preparation of building-site and transport concrete at higher temperatures. Due to its special composition and wide dosage variation, this product can be used as a plasticizer or superplasticizer.

The use of **Cementol Zeta PLUS** enables:

- the preparation of concrete / poured concrete with good workability and low w/c ratio (no segregation and bleeding),
- a slower decrease of concrete workability than with the use of traditional superplasticizers,
- reduced vibration or time of vibration.

## ACCORDANCE WITH THE SIST EN 934-2 STANDARD

Property	Declared values with acceptable deviation
Appearance	Yellow-brown liquid
Density, 20°C	(1,06 ± 0,02) kg/dm <sup>3</sup>
pH	6,5 ± 1,0
Water soluble chloride content (Cl <sup>-</sup> )	Chloride free
Alkali content (Na <sub>2</sub> O equivalent)	< 3,0 %

## ACTION

**Cementol Zeta PLUS** is adsorbed onto cement particles. Due to its volume structure, it prevents cement agglomeration by inducing electrostatic repulsion and steric hindrance – it prevents the close contact of the particles. The adsorption process is gradual and decelerated, therefore the concrete prepared with **Cementol Zeta PLUS** has a longer workability time than if traditional superplasticizers had been used.

## DOSAGE AND INSTRUCTIONS FOR USE

- Dosage: 0,3 – 1,4 % of binder weight (cement, cement + mineral admixture),  
- plasticizer: 0,3 – 0,6 % of binder weight (cement, cement + mineral admixture),  
- superplasticizer: 0,7– 1,4 % of binder weight (cement, cement + mineral admixture),  
depending on the required properties of fresh and hardened concrete: w/c ratio and required workability of concrete, type and quantity of binder.
- The optimal water reduction is achieved by adding **Cementol Zeta PLUS** to the concrete mixture which has previously been mixed with 50 – 70 % of the mixing water. However, **Cementol Zeta PLUS** can also first be diluted with mixing water and then added to the concrete mixture.
- Examples of use:  
0,3 % of CEM I 42,5 R weight: as a plasticizer (w/c ratio = 0,53; slump: 125 mm)  
0,7 % of CEM I 42,5 R weight: as a superplasticizer (w/c ratio = 0,48; slump: 150 mm)  
1,2 % of (CEM I 42,5 R + Fly ash) weight: as a superplasticizer (w/c ratio=0,58, slump: 150 mm)



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*by (0,7- 1,4)%*

*Plasticizer, SIST EN 934-2: T 2*

*by (0,3 - 0,6)%*

### Note:

- **Cementol Zeta PLUS** is compatible with **Cementol Eta S** and **Cementol Eta S1** air-entraining admixtures.
- **Cementol Zeta PLUS** is compatible with the superplasticizer **Cementol Zeta SUPER S**.
- **Cementol Zeta PLUS** is compatible with **Cementol B NOVI** hardening accelerating admixture.
- **Cementol Zeta PLUS** is **NOT** compatible with traditional superplasticizers **Cementol Zeta / Zeta P / Zeta T**.

### ADVANTAGES

- Longer concrete workability time.
- Higher initial and final strength.
- Improved watertightness.
- Slower carbonation.
- Concreting at higher temperatures.
- Durability.

### PACKING

- 50 kg plastic cans, 1m<sup>3</sup> containers

### STORAGE

- Store the product in tightly closed packaging at temperatures between +5°C and +35°C. Protect from damage, freezing and direct sunlight.
- In tightly closed and undamaged packaging, the shelf life of the product is min. 1 year from the production date.
- The product may still be used after the date of expiry, but the characteristics important for the intended use have to be examined.

### SAFETY PRECAUTIONS

General instructions for working with chemicals should be observed when working with **Cementol Zeta PLUS**:

- Eating, drinking or smoking during work is prohibited.
- After finishing work, hands should be thoroughly washed with water.

### NOTE

**Cementol Zeta PLUS** is a new product. Instructions are given on the basis of laboratory research and technical experience of the firm. Due to specific conditions and work methods, preliminary tests are advised for every type of use of **Cementol Zeta PLUS** alone or combined with other admixtures.

Since we cannot influence the course of work, we cannot be held responsible for its quality.

### **Cementol Zeta PLUS:**

- *Superplasticizer - meets the SIST EN 934-2 standard requirements (by dosage: 0,7- 1,4 %).*
- *Plasticizer - meets the SIST EN 934-2 standard requirements (by dosage: 0,3 - 0,6 %).*