

## Vinplast CL 10

### Description

Vinplast CL 10 is a highly effective, liquid, third generation superplasticiser based on polycarboxylates that reduces the water content in the mix, increases the workability of the fresh concrete and improves compressive strengths at early and long-term age. It is more <multifunctional>compare to conventional superplasticisers – high flow of the concrete is reached along with reduced water and cement content specified in the requirements of the project.

### Applications

*VINPLAST CL 10* is used for various kinds of concrete to increase workability, to reduce water and/or cement content.

Production of self compacting lowing concrete

Production of vide range of ready mixed concrete

Production of high strength concrete

Production of reinforced and prestressed concrete structures

### *VINPLAST CL 10* is used

In production of high plasticity and rheoplastic concrete mixes with slump class S4 and S5 according EN 206-1 standard without additional water .

For increasing ultimate strength on the concrete by improving cement/water ratio by 60% with no influence to the consistency of the concrete mix.

To enable economies in cement and water with retaining good workability and stability in mechanical properties thus reducing costs of concrete placement.

To reduce shrinkage by reducing water amount and to prevent cracking of the concrete by reducing hidratation heat and to increases durability of the concrete.

In production of concrete with increased resistance to freeze-thow cicles *VINPLAS CL 10* is combined with the air entraining additive *VINMIX*.

### **Dosage**

Recommended dose of Vinplast CL 10 is 0.3-1.5% of the cement weight depending on the desirable qualities.

By adding 1% of cement weight 22cm slump can be achieved (if initial slump without the additive was 4 cm)

By adding 1.5% of cement weight 20% reduction of water, 49% increase in comprehensive strength can be achieved along with increase in slump from 8 to 15 cm.

By adding 1% of cement weight 20% economy of cement can be achieved without reduction of the concrete strength.

Note! : Effectiveness of the additive can be influenced by many factors such as grade and shape of the aggregates, cement content etc.

Trial mixes must be carried out to determine the correct levels of the admixture to achieve the desired concrete properties.

### **Direction of use**

Viplast CL 10 can be added to the concrete mix after water is added or dispensed in the mixing water. No extension to normal mixing times is necessary.