Construction

SikaPlast® 805

Powered by ViscoCrete®

High performance superplasticizer

Product Description	SikaPlast® 805 is a superplasticizer high range water reducer for concrete.
Uses	SikaPlast® 805 promotes a very high plastification and good slump keeping properties, as well as a faster development of mechanical strengths. SikaPlast® 805 is specially suitable for the following situations: ■ Medium to high compressive strength concrete (C30/37 or higher), with any consistency, in which the main target is to achieve a considerable economy of cement. ■ Concrete that requires high yearly strengths. ■ Concrete with strong fluidity or SCC with high yearly strengths. ■ Faster concretings.
Characteristics/ Advantages	SikaPlast® 805 enables: ■ Great level of water reduction, from 20 to 30% with increased mechanical resistance and low permeability. ■ Good slump keeping that could reach 2 hours at +20 ºC depending of the kind of cement, initial slump flow and admixture dosage. ■ SCC concrete for precast or ready mix concrete with good compressive strength development. ■ A more favourable performance regarding shrinkage and creep and also change of aggregates or cement. ■ Chloride free.
Aprovals / Standards	Meets the requirements of NP EN 934-2: T3.1/ 3.2.

Product Data

Appearance/ Colours	Brown liquid.
Packaging	210 kg (200 litres); 1050 kg (1 m^3).
Storage conditions/ Shelf-life	12 months from date of production if stored in undamaged and unopened, original sealed packaging, in dry conditions at temperatures between +5 and +35 ºC. Protect from direct sunlight.

Technical Data

Chemical base	Modified polycarboxylate in water.
Density	1,05 ± 0,02 kg/dm^3 (at +23 ± 2 ºC).

pH (23 ± 2 ºC)	5,0 ±1,0.
Solid content	23,8 ± 1,2%.
Chloride content	≤ 0,1%.

System information

Application details

Consumption/ Dosage	According to the main goal we recommend starting from the following dosage: ■ Current dosage: 0,4% to 0,9% of cement weight. ■ SCC: 1,0% to 1,4% of cement weight . ■ S4 or S5 slump flow concrete: 1,0% to 1,6% of cement weight. ■ If it is necessary to extend or to increase workability, due to any difficulty, it is possible to add more SikaPlast® 805, as long as it does not exceed 2,0% total admixture.

Application instructions

Mixing	If possible, concrete should be prepared with only $^2/_3$ of the water, only then add SikaPlast® 805 and mix energetically for about 1 minute/ m^3. Only then add some more water to achieve the desired consistency. This procedure allows maximum exploitation of the admixture and adequate control of water/binder ratio. If this procedure is not possible add SikaPlast® 805 to the whole quantity of water and mix the concrete until a homogeneous mix is obtained. It is important to assure a minimum mixing time of 1.5 to 2 minutes for the full effect of the admixture. Never add SikaPlast® 805 directly to cement or aggregates (efficiency reduction). It is possible to add the admixture in the concrete truck mixer, as long as concrete homogeneity is assured. **Re-dosage on site:** Extra care should be taken incorporating the admixture on concrete. We recommend a slight addition of water to the admixture container, only enough to reduce its viscosity and ease its incorporation. Concrete should be “pulled” and then SikaPlast® 805 added slowly, while the tumble spins rapidly. If necessary invert tumble rotation to help homogenising. Minimum mixing time: 3 minutes.
Aplication method/ Tools	SikaPlast® 805 allows the production of high performance concrete, as long as the composition is well design and standard rules of good concreting practice are followed. Fresh concrete must be cured properly and as early as possible.
Cleaning of tools	Clean all tools and application equipment with water immediately after use.
Notes on application/ Limitations	■ We recommend previous tests to determine the correct dosage of SikaPlast® 805 and whenever concrete composition is changed. ■ Admixture may freeze when exposed to frost or very low temperatures, but after slow defrosting, careful shaking and homogeneity checking, it may be used again.
Value base	All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

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Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

"Manufacturers civil responsibility is covered by insurance policy nº CH00003018LI05A with XL Insurance Switzerland "

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products.

The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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