

PRODUCT DATA SHEET

SikaPlast®-399 WF

PCE BASED SUPERPLASTICIZING AND SET RETARDING CONCRETE ADMIXTURE

DESCRIPTION

SikaPlast®-399 WF is a 3rd generation polymer based high performance superplasticizer for producing soft consistency concrete.

SikaPlast®-399 WF meets the requirements of ASTM C 494 Type D & G

SikaPlast®-399 WF conforms to Type G when used at 0.8 - 1.0% dosage, depending on cement type used.

USES

SikaPlast®-399 WF is mainly suitable for the manufacture of concrete for RMC plants and site batch concrete

SikaPlast®-399 WF is used for the following types of concrete:

- Bored piles
- Barrette foundations and diaphragm walls
- Ground and suspended slabs
- Columns and walls

CHARACTERISTICS / ADVANTAGES

SikaPlast®-399 WF combines different modes of actions. By adsorption on the surface of the fines and keeping them apart while the hydration is in progress, SikaPlast®-399 WF effects the following concrete properties:

- Long slump keeping and high water reduction
- Compatible with SCM like GGBSF, PFA
- High flowability (considerably reduced placing and compacting work)
- Faster evolution of early strength development
- Workability can be maintained up to 3-6 hours (still depends on admixture dosage, cement type, temperature)
- Improved creep and shrinkage resistance characteristics
- When used at higher dosages, SikaPlast®-399 WF can give extended working time

PRODUCT INFORMATION

Chemical base	Modified Poly carboxylate in water
Packaging	200/1000 litres
Appearance / Colour	Liquid/ dark brown colour
Shelf life	12 months if stored properly in original unopened packaging.
Storage conditions	Stored in dry conditions, protected from direct sunlight and at temperatures between +5 °C and +30 °C
Density	1.085 – 1.105 kg/L (at 20°C)
pH-Value	4.50 – 6.50 (At 25 °C)

TECHNICAL INFORMATION

Concreting Guidance Concrete placing: With the use of SikaPlast®-399 WF, concrete of highest

quality is being produced, however state of the art concrete technology, such as mixing, placing vibrating and curing must be respected and applied
Curing: Effective measures for concrete curing must be followed

Specific Advice

SikaPlast®-399 WF is added to the gauging water prior to its addition to the dry mix or added separately to the wetted concrete mix.
For optimum utilization of the high range water reducer we recommend a minimum wet mixing time of 60 seconds.
When adding the balance of the batching water to adjust concrete consistency this should be done after a minimum of 2/3 of the wet mixing time to avoid surplus water in the concrete.

APPLICATION INFORMATION

Recommended Dosage

0.5 - 2.0 ltr per 100 kg of cement/binder
Typical 0.8 to 1.2 ltr/100kg of cement/binder

Compatibility

SikaPlast®-399 WF may be combined with all Sikament, Sika® Aer, Sika® Pump, Sikacrete® PP1 products, but must be added separately to the mix and not premixed prior its addition
SikaPlast®-399 WF is compatible with all Portland Cement types

BASIS OF PRODUCT DATA

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.

ECOLOGY, HEALTH AND SAFETY

Protective Measures: Avoid prolonged contact with skin. Wash off thoroughly with soap water. In case of contact with eyes or mouth, rinse immediately with clean warm water and seek medical attention without delay.

Avoid contact with food stuff and utensils.

Ecology/Waste disposal: Do not dispose of into water or soil, but according to local regulations.

Transportation class: Non-hazardous

Toxicity: Non-toxic

IMPORTANT CONSIDERATION

Overdosing will result in increased workability and setting time of the Concrete, however, provided that curing is effective, ultimate concrete strength and properties will not be affected

Accurate dispensing equipment can be supplied by Sika Limited (Vietnam)

Use an appropriate concrete mixer and do not mix by hand.

Trial mixes are recommended to establish exact dosage rates required to suit individual requirements. Please contact Sika Technical Department for further

assistance.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

LEGAL NOTES

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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