

PRODUCT DATA SHEET

SikaPlast®-318 Plus PH

PCE BASED SUPERPLASTICIZING AND SET RETARDING CONCRETE ADMIXTURE

DESCRIPTION

SikaPlast®-318 Plus PH is a 3rd generation polymer based high performance superplasticizer for producing soft consistency concrete.

SikaPlast®-318 Plus PH meets the requirements of ASTM C 494 Type D & G.

SikaPlast®-318 Plus PH conforms to Type G when used at 0.8–1.0% dosage, depending on cement type used.

USES

SikaPlast®-318 Plus PH is mainly suitable for the manufacture of concrete at RMC plants and site batch concrete. SikaPlast®-318 Plus PH is used for the following types of concrete:

- Big diameter and/or deep bored piles
- Barrette foundations and diaphragm walls
- Bridges, caissons and girders
- Mass pour

CHARACTERISTICS / ADVANTAGES

SikaPlast®-318 Plus PH combines different modes of actions. By adsorption on the surface of the fines and keeping them apart while the hydration is in progress, SikaPlast®-318 Plus PH effects the following concrete properties:

- Very long slump retention and high water reduction
- High flowability (considerably reduced placing and compacting work)
- Workability can be maintained up to 6 hours (depending on admixture dosage, cement type, ambient temperature)
- Improved creep and shrinkage resistance characteristics
- When used at higher dosages, SikaPlast®-318 Plus PH can give extended working time.

SikaPlast-318 Plus PH contains negligible chlorides or other corrosion-inducing substances and can therefore be used without any restrictions for reinforced concrete structures.

PRODUCT INFORMATION

Chemical Base	Modified Polycarboxylate in water
Packaging	210 Liters Drum 1000 Liters Bulk
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.
Appearance / Colour	Liquid / Dark brown
Specific gravity	Approximately 1.065

TECHNICAL INFORMATION

Concreting Guidance

Concrete placing: With the use of SikaPlast®-318 Plus PH, 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

Overdosing will result in increased workability and setting time of the concrete; however provided that curing is effective, ultimate concrete strength and proper-ties will not be affected.

Accurate dispensing equipment can be supplied by Sika Philippines Inc. 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.

APPLICATION INFORMATION

Recommended Dosage

0.8% - 2.0% by weight of cementitious binder

Typical: 1.0–1.4 L per 100 kg of cement

Dispensing

SikaPlast®-318 Plus PH is added to the gauging water prior to its addition to the dry mix or added separately to the wetted concrete mix.

For optimum utilisation of the ultra 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.

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

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

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country

to country. Please consult the local Product Data Sheet for the exact description of the application fields.

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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