

# PRODUCT DATA SHEET

## SikaPlast®-318

### PCE BASED SUPERPLASTICIZING AND SET RETARDING CONCRETE ADMIXTURE

#### DESCRIPTION

SikaPlast®-318 is a 3<sup>rd</sup> generation polymer based high performance superplasticizer for producing soft consistency concrete.  
SikaPlast®-318 meets the requirements of ASTM C 494 Type D & G.  
SikaPlast®-318 conforms to Type G when used at 0.8–1.0% dosage, depending on cement type used.

#### USES

SikaPlast®-318 is mainly suitable for the manufacture of concrete at RMC plants and site batch concrete. SikaPlast®-318 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 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 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 can give extended working time.

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

#### PRODUCT INFORMATION

<b>Chemical base</b>	Modified Polycarboxylate in water
<b>Packaging</b>	200 / 1000 L
<b>Appearance / Colour</b>	Liquid / dark brown
<b>Shelf life</b>	12 months if stored properly in original unopened packaging.
<b>Storage conditions</b>	Stored in dry conditions, protected from direct sunlight and at temperatures between +5 °C and +30 °C.
<b>Density</b>	1.075–1.095 kg/l
<b>pH-Value</b>	4.75–6.75

---

## TECHNICAL INFORMATION

---

### Concreting Guidance

**Concrete placing:** With the use of SikaPlast®-318, 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®-318 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.

---

## APPLICATION INFORMATION

---

### Recommended Dosage

0.8–2.0 L per 100 kg of cement  
Typical: 1.0–1.4 L per 100 kg of cement

### Compatibility

SikaPlast®-318 may be combined with all Sikament®, Sika® Aer, Sika® Pump, Sikacrete® PP-1 products, but must be added separately to the mix and not pre-mixed prior its addition.  
SikaPlast®-318 is compatible with all portland cement types.

---

## 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.

## 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.

## 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.

## 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

## 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.

**Sika Limited (Vietnam)**  
Nhon Trach 1 Industrial Zone,  
Nhon Trach Dist., Dong Nai Province,  
Tel: (84-251) 3560 700  
Fax: (84-251) 3560 699  
sikavietnam@vn.sika.com  
vnm.sika.com



Product Data Sheet  
SikaPlast®-318  
December 2016, Version 01.01  
021301011000002089

SikaPlast-318-en-VN-(12-2016)-1-1.pdf

