

PRODUCT DATA SHEET

SikaPlast®-178 M

PCE BASED SUPERPLASTICIZING AND SET RETARDING CONCRETE ADMIXTURE

DESCRIPTION

SikaPlast®-178 M is a 3rd generation polymer based high performance superplasticizer for producing soft consistency concrete.

SikaPlast®-178 M meets the requirements of ASTM C 494 Type D & G

SikaPlast®-178 M conforms to Type G when used at 0.8 - 1.0% dosage, depending on cement type used.

USES

SikaPlast®-178 M is mainly suitable for the manufacture of concrete for RMC plants and site batch concrete

SikaPlast®-178 M 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®-178 M combines different modes of actions. By adsorption on the surface of the fines and keeping them apart while the hydration is in progress, SikaPlast®-178 M effects the following concrete properties:

- Long slump keeping and high water reduction
- High flowability (considerably reduced placing and compacting work)
- Faster evolution of early strength development
- Workability can be maintained up to 3 hours (still depends on admixture dosage, cement type, temperature)
- Improved creep and shrinkage resistance characteristics
- When used at higher dosages, SikaPlast®-178 M can give extended working time

PRODUCT INFORMATION

Chemical base	Modified Poly carboxylate in water
Packaging	200/1000 litres
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/ light brown colour
Density	1.065 – 1.085 kg/L (at 20°C)

TECHNICAL INFORMATION

Concreting Guidance

Concrete placing: With the use of SikaPlast®-178 M, 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®-178 M 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 - 2ltr per 100 kg of cement/binder
Typical 0.8 to 1.2 ltr/100kg of cement/binder

Compatibility

SikaPlast®-178 M 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®-178 M 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.

FURTHER DOCUMENTS

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.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

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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SikaPlast®-178 M
March 2022, Version 01.02
021301011000003650

SikaPlast-178M-en-VN-(03-2022)-1-2.pdf

