

PRODUCT DATA SHEET

SikaPlast® GL 118

(formerly MasterGlenium® 118)

Polycarboxylic ether-based superplasticizer to produce high-quality ready-mix concrete

DESCRIPTION

SikaPlast® GL 118 is an innovative latest generation superplasticizer based on polycarboxylic ether (PCE) polymers and is specially engineered for ready-mix concrete.

SikaPlast® GL 118 greatly improves cement dispersion. At the start of the mixing process the same electrostatic dispersion occurs but the presence of the lateral chains, linked to the polymer backbone, generate a steric hindrance which stabilises the cement particles capacity to separate and disperse. This mechanism provides flowable concrete with greatly reduced water demand.

USES

SikaPlast® GL 118 is used to produce high-quality ready-mix concrete.

FEATURES

- Capability of delivering high performance concrete.
- Production of a concrete with low water cement ratios with excellent workability retention properties.
- A versatile product for many application requirements.
- Easier placing and faster strength development.
- Improved concrete surfaces.
- Insurance that concrete meets original specification.
- High quality durable concrete.

PRODUCT INFORMATION

Packaging	SikaPlast® GL 118 is available in 1000 litre IBCs or in bulk.
Appearance and colour	Brown liquid
Shelf life	The shelf life is 12 months from date of manufacture when stored correctly.
Storage conditions	SikaPlast® GL 118 should be stored out of direct sunlight and protected from extremes of temperatures. The occurrence of a surface layer with SikaPlast® GL 118 is normal and will have no effect on the performance of the product.
Density	1.05 ± 0,02
pH-Value	5 ± 1,5
Conventional dry material content	19 ± 2 (%)
Total chloride ion content	“Chloride-free” to EN 934-2

APPLICATION INFORMATION

Recommended dosage

The normally recommended dosage rate of SikaPlast® GL 118 is: **0.4 to 4.0 litres per 100kg** of total cementitious material. Other dosages may be recommended in special cases according to specific site conditions. In this case, please consult our Technical Services Department for advice. It is recommended that trials be conducted with the actual materials to be used and at the specified SikaPlast® GL 118 dose rates to verify performance before proceeding to application.

Dispensing

SikaPlast® GL 118 is a ready-to-use admixture to be added to the concrete as a separate component. Optimal results are obtained if SikaPlast® GL 118 is poured into the concrete mix right after the addition of the first 80% of the mixing water, i.e. when all solids are wetted. Avoid adding the admixture to the dry aggregates.

SYSTEM INFORMATION

Compatibility

SikaPlast® GL 118 is not compatible with Sikament RB superplasticizers. SikaPlast® GL 118 is suitable for mixes containing:

- Microsilica (Silica Fume)
- Fly Ash (PFA)
- GGBS (ground granulated blast furnace slag)

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 DOCUMENTATION

SikaPlast® GL 118 contains no hazardous substances requiring labelling. For further information refer to the Material Safety Data Sheet.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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