

PRODUCT DATA SHEET

SikaPlast® PH 8650

(formerly MasterPolyheed® 8650)

High range water reducing / superplasticizing, admixture for precast and High-performance concrete

DESCRIPTION

SikaPlast® PH 8650 is an admixture of a new generation based on second generation polycarboxylate ether polymer with high early strength gains. SikaPlast® PH 8650 is free of chloride & low alkali. It is compatible with all types of cements.

USES

- SikaPlast® PH 8650 is suitable for making precast concrete elements at all workability's including Rheo-plastic or Super workable concrete having fluid consistence, no segregation, a low water binder ratio and, consequently high early and long term strengths
- As a component of Zero Energy System™
- Concreting in cold weather

FEATURES

- Achieve high early strengths
- Produces Rheo-plastic and Rheo-dynamic concretes having a low water cement ratio
- Optimize curing cycles by reducing curing time or curing temperatures
- Eliminate heat curing
- Eliminate the energy required for placing, compacting & curing (Zero Energy System™)
- Increase productivity/ reduction in cycle time
- Improve surface appearance
- Produce durable precast concrete elements
- Improved engineering properties, compared to traditional superplasticizer such as early and ultimate compressive and flexural strengths, reduced shrinkage and low permeability.

CERTIFICATES AND TEST REPORTS

Complies with ASTM C494 Type A & F, EN 934 2 T3.1/3.2 & IS 9103: 1999

PRODUCT INFORMATION

Composition	Modified Poly Carboxylate Ether (PCE)
Packaging	SikaPlast® PH 8650 is supplied in 225 Kg, 1000 Kg or bulk on request.
Appearance and colour	Light brown free flowing liquid
Shelf life	12 months from date of production if stored properly in undamaged unopened, original sealed packaging.
Storage conditions	Store in dry conditions at temperatures between +10°C and +40°C. Protect from direct sunlight and frost.
Density	1.08 ± 0.02 at 25°C (ISO 758)
pH-Value	≥ 6

APPLICATION INFORMATION

Recommended dosage

Optimum dosage of SikaPlast® PH 8650 should be determined in trial mixes. As a guide, a dosage of 1500 gm per 100kg of cementitious material is normally recommended. Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of the recommended range may be required. In such cases, contact your local Sika representative.

Effects of over dosage

A severe over-dosage of SikaPlast® PH 8650 can result in the following:

- Air entrainment
- Bleed/segregation of mix, quick loss of workability.
- Increased plastic shrinkage.

A slight overdosing may not adversely affect the ultimate strength of the concrete and can achieve higher strengths than normal concrete, provided it is properly compacted and cured. Due allowance should be made for the effect of fluid concrete pressure on form work, and stripping times should be monitored.

In the event of over dosage consult your local Sika representative immediately.

Compatibility

SikaPlast® PH 8650 may be combined with many other Sika® Products.

Compatible with all types of cements and cementitious materials.

Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information about specific combinations.

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 Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

DISPENSING

SikaPlast® PH 8650 is a ready-to-use liquid which is dispensed into the concrete together with the mixing water. The plasticising effect and water reduction are higher if the admixture is added to the damp concrete after 70 to 90% of the mixing water has been added.

The addition of SikaPlast® PH 8650 to dry aggregate or cement is not recommended. Automatic dispensers are available. Thorough mixing is essential and a minimum mixing cycle, after the addition of SikaPlast® PH 8650 of 60 seconds for forced action mixers is recommended.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be mechanically removed.

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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Product Data Sheet

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