

PRODUCT DATA SHEET

SikaPlast® PH 8396

(formerly MasterPolyheed® 8396)

Retarding superplasticizer based on PCE

DESCRIPTION

SikaPlast® PH 8396 is an economical admixture based on modified Poly Carboxylate ether. The product has been primarily developed for applications in ready mix and site-batched concrete. SikaPlast® PH 8396 is specially designed to allow considerable reduction of mixing water while maintaining control on extend of set retardation.

SikaPlast® PH 8396 is free of chloride & low alkali. It is compatible with all types of cements.

USES

- Ready mixed concrete
- Long-distance transporting
- Pumped concrete
- High workability without segregation or bleeding
- High performance concrete for durability
- Congested/complex reinforced sections
- Mixes requiring >20% water reductions

PRODUCT INFORMATION

Composition	Modified Poly Carboxylate Ether (PCE)
Packaging	SikaPlast® PH 8396 is supplied in 225 Kg, 1000 Kg or bulk on request.
Shelf life	12 months from date of production if stored properly in undamaged unopened, original sealed packaging.
Storage conditions	SikaPlast® PH 8396 must be stored where temperatures do not drop below +5°C. If product has frozen, thaw at +5°C or above and completely reconstitute using mild mechanical agitation. Do not use pressurized air for agitation. Store under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult your local Sika representative.
Appearance and colour	Reddish brown liquid

FEATURES

- Good dispersion even in mixes with high fines
- High workability for longer periods
- Lower pumping pressure
- Resistance to segregation even at high workability
- Extended setting with longer workability
- Reduced water content for a given workability
- Higher ultimate strengths
- Increased ease in finishing concrete

CERTIFICATES AND TEST REPORTS

ASTM C494 Type B, D & G, EN 934-2 T3.1/3.2, IS 9103

Density 1.11 ± 0.02 at 25°C

pH-Value ≥ 6

APPLICATION INFORMATION

Recommended dosage

Optimum dosage of SikaPlast® PH 8396 should be determined with trial mixes. As a guide, a dosage range of 600 ml to 1500 ml 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.

For additional information on SikaPlast® PH 8396 admixture or on its use in developing concrete mixes with special performance characteristics, contact your local Sika representative.

Effects of over dosage

A severe over-dosage of SikaPlast® PH 8396 can result in the following:

- Reduced permeability
- Long extension of initial and final set
- Increase in air entrainment

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.

Dispensing

SikaPlast® PH 8396 is a ready-to-use liquid which is dispensed into the concrete together with the mixing water. The plasticizing effect and water reduction are higher if the admixture is added to the damp concrete after 50 to 70% of the mixing water has been added. The addition of SikaPlast® PH 8396 to dry aggregate or cement is not recommended.

Thorough mixing is essential and a minimum mixing cycle, after the addition of the SikaPlast® PH 8396, of 60 seconds for forced action mixers is recommended.

Compatibility

SikaPlast® PH 8396 is compatible with most of the Sika products. Use Sika Stabilizer as viscosity modifying agent in self compacting concrete. SikaPlast® PH 8396 is not compatible with Melamine or Naphthalene based admixtures and should not be used in conjunction in the same mix. SikaPlast® PH 8396 is compatible with ligno-sulphonates and carboxylic acid based plasticizer and retarders and also with most type of air-entrainers, accelerators, retarders, extended set-control admixtures, corrosion inhibitors, and shrinkage reducers. SikaPlast® PH 8396 is also compatible with slag and pozzolans such as fly ash, metakaolin and silica fume.

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 INFORMATION

Corrosivity – non corrosive

SikaPlast® PH 8396 admixture will neither initiate nor promote corrosion of reinforcing steel embedded in concrete, prestressed concrete or concrete placed on galvanized steel floor and roof systems. Neither calcium chloride nor any calcium chloride-based ingredients are used in the manufacture of SikaPlast® PH

8396 admixture. In all concrete application, SikaPlast® PH 8396 admixture will conform to the most stringent or minimum chloride ion limits currently suggested by construction industry standards and practices.

Workability

SikaPlast® PH 8396 ensures that rheoplastic concrete remains workable in excess of 3 hours at +25°C. Workability loss is dependent on temperature, and on the type of cement, the nature of aggregates, the method of transport and initial workability.

It is strongly recommended that concrete should be properly cured particularly in hot, windy and dry climates.

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.

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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