

## PRODUCT DATA SHEET

# SikaPlast® PH 8394

(formerly MasterPolyheed® 8394)

High range water reducing/ super plasticizing admixture for precast and High-performance concrete

## DESCRIPTION

SikaPlast® PH 8394 is an admixture of a new generation based on second-generation polycarboxylate ether polymer with high early strength gains. SikaPlast® PH 8394 is free of chloride & low alkali. It is compatible with all types of cements.

## USES

- SikaPlast® PH 8394 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
- 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

ASTM C494 Type B, D & G, EN 934-2 T3.1/3.2, IS 9103: 1999

## PRODUCT INFORMATION

Composition	Modified Poly Carboxylate Ether (PCE)
Packaging	SikaPlast® PH 8394 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	Store in dry conditions at temperatures between +10°C and +40°C. Protect from direct sunlight and frost.
Appearance and colour	Reddish brown liquid
Density	~1.09 at 25°C
pH-Value	≥ 6

# APPLICATION INFORMATION

---

## Recommended dosage

Optimum dosage of SikaPlast® PH 8394 should be determined in trial mixes. As a guide, a dosage of 500 gm per 1500kg 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 Sika technical service representative.

### Effects of over dosage

A severe over-dosage of SikaPlast® PH 8394 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 with Sika technical service representative immediately.

---

## Dispensing

SikaPlast® PH 8394 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 70 to 90% of the mixing water has been added. The addition of SikaPlast® PH 8394 to dry aggregate or cement is not recommended.

Thorough mixing is essential and a minimum mixing cycle, after the addition of SikaPlast® PH 8394, of 60 seconds for forced action mixers is recommended.

---

## Compatibility

SikaPlast® PH 8394 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 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.

## IMPORTANT CONSIDERATIONS

When using SikaPlast® PH 8394 a suitable mix design has to be taken into account and local material sources shall be trailed.

SikaPlast® PH 8394 shall not be added to dry cement. Excessive water addition, overdosing, changes in aggregates properties, cement properties, cementitious materials properties may cause bleeding, segregation issue, workability or setting issues.

### Frost:

If frozen and / or if precipitation has occurred, SikaPlast® PH 8394 may be used after thawing slowly at room temperature followed by intensive remixing.

## 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.

## MAINTENANCE INSTRUCTIONS

### CLEANING

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.

### SIKA BANGLADESH LIMITED

Impetus Center, 242/B, 8th Floor  
Bir Uttam Mir Shawkat Sarak  
Dhaka-1208, Bangladesh  
Phone 1: +88 01313095060  
Phone 2: +88 01313095061  
bgd.sika.com

### Product Data Sheet

SikaPlast® PH 8394  
May 2024, Version 01.01  
02130100000002230

SikaPlastPH8394-en-BD-(05-2024)-1-1.pdf

