BUILDING TRUST

PRODUCT DATA SHEET

Sika® Plastiment®-40 KE

Water reducing admixture for concrete

DESCRIPTION

Sika® Plastiment® 40 KE is a plasticiser for concrete and mortar based on modified PCE/Gluconates

USES

Sika® Plastiment® 40KE is especially suitable for production of ready mixed and site batched concrete with normal transportation times and workability requirements, high water reduction and improved flow characteristics. Sika® Plastiment® 40 KE is recommended for the following:

- Concrete with S3-S4 class consistency
- Concrete with medium water reduction (up to 10 %)
- Concrete with reduced amount of fines or difficult aggregates
- Concrete with difficult placing conditions
- Concrete with ordinery transport distances

CHARACTERISTICS / ADVANTAGES

Sika® Plastiment® 40 KE is a powerful plasticiser which acts through several different mechanisms including surface adsorption separating the cementitious binder particles due to the electrokinetic potential. The following advantageous properties are achieved:

- Superior plasticising effect, resulting in improved flow, placing and compaction characteristics
- Keeps extended workability time with many difficult cements despite water reduction
- Water reduction, resulting in improved density, higher strength and reduced permeability
- Reduced tendency to shrinkage and creep ▪ Reduced carbonation of the concrete
- Improved cohesion of the concrete

Sika® Plastiment® 40 KE does not contain chlorides or any other ingredients which promote corrosion of steel. It is therefore suitable for use in reinforced and prestressed concrete structures.

APPROVALS / CERTIFICATES

Complies to EN 934-2 Table 2

PRODUCT INFORMATION

Composition	Aqueous solution of modified PCE/Gluconates
Packaging	▪ 1000 litres IBC ▪ 200 litres drum ▪ 5 litres Jerricans
Appearance / Colour	Clear Liquid
Shelf life	12 months from date of production if stored properly in undamaged, unopened, originally sealed packaging
Storage conditions	Storage at temperatures between +5°C and +30°C. Protect from direct sunlight, frost and contamination.
Density	1.05 ± 0.02
pH-Value	5.0 ± 1.0
Conventional dry material content	12.50 ± 2.0
Total chloride ion content	≤0.1 %
Concreting guidance	The standard rules of good concreting practice, concerning production and placing, are to be followed. Fresh concrete must be cured properly and curing applied as early as possible. Laboratory trials shall be carried out before concreting on site, especially when using a new mix design or producing with new concrete components
Recommended dosage	0.2- 2.0 % by weight of cement. Usual dosage. When accidental overdosing occurs, this will have the effect of extending the setting time. During this period, the concrete must be kept moist in order to prevent premature drying out.
Compatibility	Sika® Plastiment® 40 KE may be combined with many other Sika products. Important: Always conduct trials before combining products in specific mixes and contact Sika Technical Service for more information and advice
Dispensing	Sika® Plastiment® 40 KE is added to the gauging water or added with it into the concrete mixer. To take advantage of the workability enhancing ability, a wet mixing time, which is depending on the mixing conditions and mixer performance, of at least 60 seconds is recommended. To avoid excess water in the concrete, the final dosage must begin only after 2/3 of the wet mixing time

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

For storage in tanks always use cleaned tanks and clean and disinfect them minimum once a year. If frozen, Sika® Plastiment® 40 KE may be used after thawing slowly at room temperature following intensive remix. Retarding according to dosage. Excessive water addition or overdosing may cause bleeding or segregation. Formwork pressure: due to plasticising effect and long opentime concretes with Sika® Plastiment® 40 KE can cause extended formwork pressure. Preliminary trials are a must

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

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses

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 Kenya Limited
Josh Industrial Estate
P.O Box 38645 · 00623 Nairobi · Kenya
Mobile: +254 711 140234 / +254 786 140234
Web: ken.sika.com