DESCRIPTION
A highly effective dual action superplasticizer for the production of free flowing concrete or as a substantial water-reducing agent for promoting high early and ultimate strengths.

USES
HB Pack 1 facilitates extreme water reduction, excellent flowability with optimal cohesion and strong self-compacting behaviour. HB Pack 1 is used for the following types of concrete:
- High flow concrete
- Self-compacting concrete (S.C.C.)
- Concrete with very high water reduction (up to 30 %)
- High strength concrete
- Concrete in hot weather and with extended transportation and workability requirements etc.

The combination of high water reduction, excellent flowability and high early strength provides clear benefits in the above mentioned applications.

CHARACTERISTICS / ADVANTAGES
HB Pack 1 provides the following properties:
As a Superplasticizer:
- Workability is greatly improved. Increased placeability in slender components with packed reinforcement.
- Decreases the amount of vibration required. Normal set without retardation.
- Significantly reduces risk of segregation.

PRODUCT INFORMATION

<table>
<thead>
<tr>
<th>Chemical base</th>
<th>Modified polycarboxylate copolymer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>40 x 250 gr water soluble bag</td>
</tr>
<tr>
<td>Appearance / Colour</td>
<td>Powder / White</td>
</tr>
<tr>
<td>Shelf life</td>
<td>12 months from the date of production when stored in original unopened packaging.</td>
</tr>
<tr>
<td>Storage conditions</td>
<td>Store in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight and frost.</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>1.06 ± 0.01</td>
</tr>
<tr>
<td>pH-Value</td>
<td>7.0 – 9.0</td>
</tr>
<tr>
<td>Conventional Dry Material Content</td>
<td>≥ 92.00 %</td>
</tr>
</tbody>
</table>
APPLICATION INFORMATION

Recommended Dosage

HB Pack 1 can be used at the dose rate 0.30% - 0.80% by total weight of cementitious material depending on requirements concerning workability and strength. It is recommended that trial mixes be conducted to determine the exact dosage rate required. For more specific requirements, advice is available from our Technical Service Department to determine the usage rate for optimum results.

Compatibility

HB Pack 1 may be combined with many other Sika Products. Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information about specific combinations.

APPLICATION INSTRUCTIONS

DISPENSING

HB Pack 1 can be added directly to the concrete mixture in powder form.

In case HB Pack 1 is used in liquid form then it should be dispensed to the mixing water prior to its addition to the aggregates or as in most cases, it can be added directly to the freshly mixed concrete.

When added directly to the freshly mixed concrete, the plasticizing effect is more pronounced.

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.

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.

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.

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.