

SikaPaver[®] HC-1

High performance compaction aid for semi-dry / no-slump concrete products

Construction

Product Description

SikaPaver[®] HC-1 is a very efficient high performance compaction aid for semi-dry/no-slump concrete.

This innovative admixture technology has been specifically developed for use in low cement content semi-dry/no-slump mixes.

Uses

SikaPaver[®] HC-1 is used for producing optimised coloured and grey semi-dry/no-slump concrete with a very low moisture content. Semi-dry/no-slump concrete production is generally used in the manufacture of machine-made concrete products associated with instant de-moulding such as:

- Block Paving (grey / coloured)
- Paving flags
- Kerbstones
- Edgings and other items for garden and landscape design
- Building blocks and bricks
- Concrete pipes
- Manholes and drainage goods
- Semi-dry pressed & hollow core slabs

Characteristics / Advantages

SikaPaver[®] HC-1 offers substantial benefits to the producer of semi-dry/no-slump concrete products:

- Efficient dispersion and distribution of cement, additives and pigments
- Air entrainment
- Improved movement of the concrete through the machine (faster mould filling)
- Optimised compaction with shorter pressing time and increased throughput [shorter production cycle]
- Minimized friction between the mould and the concrete [Reductions in equipment wear and tear]
- Reduced adhesion/stickiness between top layer concrete and pressing head/tamper (equipment/tools)
- Increased “green” strength on immediate de-moulding [keeps the shape of freshly de-moulded semi-dry concrete products because it prevents slumping after de-moulding]
- More economic concrete mix designs
- Create superior products



SikaPaver® HC-1 allows for the following advantages in the finished concrete products:

- Closer textured, smoother and more uniform surfaces (improved surface finish)
- Consistent product quality due to a homogenous concrete mix
- Increased density
- Less variation in densities and strengths across the area of the mould (constant spread of density & strength over the pallet)
- Minimized damage due to early handling
- Enhanced early and ultimate compressive and tensile strengths
- Increased freeze-thaw resistance
- Improved durability and life expectancy
- Less customer returns and second grade products

Tests

Approvals / Standards	All values are internal test results according to EN934. Quality produced in accordance with ISO 9001.
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Product Data

Form

Appearance / Colour	Clear liquid
Packaging	Plastic container: 20 kg HDPE Barrel: 200 kg net weight IBC: 1000 kg net weight Bulk: Dependent upon requirements

Storage

Storage Conditions / Shelf-Life	12 months from date of production if stored properly in original, unopened packaging (drums, containers). Protect from frost, direct sunlight and contamination. When it is delivered in bulk, the tanks and equipment used must be free of residues from previous deliveries.
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Technical Data

Chemical Base	Surfactant blend
Density	1.00 ± 0.01 kg/l (at +30°C)
pH Value	6.5 to 7

System Information

Application Details

Dosage	0.2% - 0.5% of cement weight
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Application Instructions

Mixing Time	In general a mixing time of at least 30 seconds is essential, although the actual mixing time after adding the admixture depends on the individual circumstances and should be determined by trials.
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Notes on Application / Limitations	SikaPaver® HC-1 can be added with the mixing water or introduced at the end of the mixing process. SikaPaver® HC-1 must not be used for wet cast concrete as this could result in excessive air entrainment and subsequent loss of strength. Before use suitability tests must be performed.
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Value Base 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.

Local Restrictions Please note that as a result of specific local regulations the performance of this product may vary from country to country.

Health and Safety Information 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.

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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