

PRODUCT DATA SHEET

Sika® ViscoCrete®-4220 HE

HIGH PERFORMANCE SUPERPLASTICIZING ADMIXTURE

DESCRIPTION

Imparts very high workability, allows a large reduction in water content and gives high early strength.

USES

Sika® ViscoCrete®-4220 HE a superplasticizer for free flowing concrete in floors, slabs, foundations, slender components with dense re inforcement, walls and columns and other structural elements.

Sika® ViscoCrete®-4220 HE is mainly used for the following types of concrete:

- High performance concrete
- High early strength concrete
- Ready mixed concrete
- Self compacting concrete
- Precast concrete
- Pre stressed concrete
- Pumped concrete

CHARACTERISTICS / ADVANTAGES

Sika® ViscoCrete®-4220 HE produces a more uniformly cohesive high quality free flowing concrete

Sika® ViscoCrete®-4220 HE will result in the following advantages of concrete:

- Improved dispersion properties
- Very high water reduction
- Improved strength and density
- Improved durability
- Improved cohesion properties
- Improved rheology
- Improved flowability
- Reduced drying shrinkage

APPROVALS / STANDARDS

IS 9103, ASTM C494

PRODUCT INFORMATION

Chemical Base	Aqueous solution of modified poly carboxylate
Packaging	255 kg drums /Bulk supply
Appearance / Colour	Light Brown Liquid
Shelf Life	12 months from date of production if stored properly in undamaged un-opened, original sealed packaging.
Storage Conditions	Store in dry conditions at temperatures between +10°C and +40°C. Protect from direct sunlight and frost.
Density	~1.13 kg/l at 25°C
pH-Value	≥ 6

APPLICATION INFORMATION

Recommended Dosage

Optimum dosage of Sika® ViscoCrete®-4220 HE should be determined by site trials.
Recommended dosage: 0.2 – 2.0% by weight of cementitious.
A higher dosage might be used if agreed by client, consultant. Stir well before use.

Compatibility

Sika® ViscoCrete®-4220 HE may be combined with many other Sika® Products.
It is compatible with all types of ordinary Portland cement, PPC, PSC and cement replacement materials.
Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information about specific combinations.

APPLICATION INSTRUCTIONS

DISPENSING

Sika® ViscoCrete®-4220 HE can be added into the mixing water or directly into the concrete mixer after 50 – 70% of the mixing water has been added.

The addition of Sika® ViscoCrete®-4220 HE to dry aggregate or cement is not recommended.

To achieve optimum performance a minimum wet mixing time, which is depending on the mixing conditions and the mixer performance, of 60 seconds is recommended.

LIMITATIONS

Excessive water addition or overdosing may cause bleeding or segregation.

If frozen and / or if precipitation has occurred, Sika® ViscoCrete®-4220 HE may be used after thawing slowly at room temperature and after intensive mixing.

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.

LOCAL RESTRICTIONS

ECOLOGY, HEALTH AND SAFETY

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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