

PRODUCT DATA SHEET

Sika® ViscoCrete®-3000-20 M

HIGH RANGE WATER REDUCING ADMIXTURE

DESCRIPTION

Sika® ViscoCrete®-3000-20 M is a 3rd generation polymer based high performance superplasticizer for producing soft consistency high grade concrete. Sika® ViscoCrete®-3000-20 M meets the requirements of ASTM C 494 Type G.

USES

Sika® ViscoCrete®-3000-20 M is mainly suitable for the manufacture of concrete for RMC and precast batching plants.

Sika® ViscoCrete®-3000-20 M excels by its extremely high water reduction capacity, providing good flow ability while retaining optimal cohesion of the mix. Sika® ViscoCrete®-3000-20 M is used for the following types of concrete:

- High-strength / high performance cast on site concrete
- High strength bored piles
- Bridges and cantilever
- Slender components with dense reinforcement

CHARACTERISTICS / ADVANTAGES

Sika® ViscoCrete®-3000-20 M combines different modes of actions. By adsorption on the surface of the fine cement grains and keeping them apart while the hydration is in progress, Sika® ViscoCrete®-3000-20 M effects the following concrete properties:

- Extremely high water reduction
- Producing very soft consistency and suitable for long distance pumping
- High flowability (considerably reduced placing and compacting work)
- Workability can be maintained up to 120 minutes (still depends on admixture dosage, cement type, temperature)
- Highly improved waterproofness
- Improved creep and shrinkage resistance characteristics

Sika® ViscoCrete®-3000-20 M contains neither chlorides nor other corrosion-inducing substances and can therefore be used without any restrictions for reinforced and prestressed concrete structures.

PRODUCT INFORMATION

Chemical base	Modified polycarboxylate in water
Packaging	5 / 25 / 200 L drum
Appearance / Colour	Liquid / brownish colour
Shelf life	12 months if stored properly in original unopened packaging
Storage conditions	Stored in dry conditions, protected from direct sunlight and at temperatures between +5 °C and +30 °C.
Density	1.090–1.110
pH-Value	4.50–6.50

TECHNICAL INFORMATION

Concreting Guidance

Concrete placing: With the use of Sika® ViscoCrete®-3000-20 M, concrete of highest quality is being produced, however state of the art Concrete technology, such as mixing, placing vibrating and curing must be respected and applied.

Curing: Effective measures for concrete curing must be followed. Use of Sika curing compounds is advisable.

Sika® ViscoCrete®-3000-20 M is suitable for concrete to be steam cured.

Specific Advice

Sika® ViscoCrete®-3000-20 M is added to the gauging water prior to its addition to the dry mix or added separately to the wetted concrete mix.

For optimum utilisation of the ultra high range water reducer we recommend a minimum wet mixing time of 60 seconds.

When adding the balance of the batching water to adjust concrete consistency this should be done after a minimum of 2/3 of the wet mixing time to avoid surplus water in the concrete.

APPLICATION INFORMATION

Recommended Dosage

0.7–2.5 L per 100 kg of cement/cementitious (Range)
1.1–1.6 L per 100 kg of cement/cementitious (Typical)

Compatibility

Sika® ViscoCrete®-3000-20 M may be combined with all Sikament®, Sika® Aer, Sika® Pump, Sikacrete® PP-1 products, but must be added separately to the mix and not pre-mixed prior its addition.

Sika® ViscoCrete®-3000-20 M is compatible with all cement types.

LIMITATIONS

Overdosing will result in increased workability and setting time of the concrete; however provided that curing is effective, ultimate concrete strength and properties will not be affected.

Accurate dispensing equipment can be supplied by Sika Limited (Vietnam).

Use an appropriate concrete mixer and do not mix by hand.

Trial mixes are recommended to establish exact dosage rates required to suit individual requirements. Please contact Sika Technical Department for further assistance.

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

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.

ECOLOGY, HEALTH AND SAFETY

Protective measures: Avoid prolonged contact with skin. Wash off thoroughly with soap water.

In case of contact with eyes or mouth, rinse immediately with clean warm water and seek medical attention without delay.

Avoid contact with food stuff and utensils.

Ecology/ Waste disposal: Do not dispose of into water or soil, but according to local regulations.

Transportation class: Non-hazardous

Toxicity: Non-toxic

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 Limited (Vietnam)
Nhon Trach 1 Industrial Zone,
Nhon Trach Dist., Dong Nai Province,
Tel: (84-251) 3560 700
Fax: (84-251) 3560 699
sikavietnam@vn.sika.com
vnm.sika.com

BUREAU VERITAS
CERTIFICATION
ISO 9001
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