

# PRODUCT DATA SHEET

# Sika® ViscoCrete®-650 MK

HIGH RANGE WATER REDUCING/SUPERPLASTICISING ADMIXTURE FOR METAKAOLIN CONCRETE

## **PRODUCT DESCRIPTION**

Sika® ViscoCrete®-650 MK is a liquid admixture for concrete based on unique polycarboxylate polymers technologies. Sika® ViscoCrete®-650 MK is designed as a high range water reducer or superplasticiser. It is particularly suited for use in Metakaolin concretes that require low water/cement ratios and / or high water reductions whilst maintaining excellent workability retention properties. Sika® ViscoCrete®-650 MK meets the requirements of BS EN 934-2 table.

#### **USES**

Sika® ViscoCrete®-650 MK is a unique product that is suitable for the production of ready mixed concrete or pre cast concrete

- Ideally suited for use in SCC and flowing concretes
- Suitability for use across broad range of consistence classes from S4 – SF3
- High performance concrete
- High rise/pumped concrete
- Slip form concrete
- Improved effectiveness in higher ambient temperatures

# **CHARACTERISTICS / ADVANTAGES**

High range water reductions resulting in higher strengths and densities

- Extended consistence retention
- Improved cohesion properties
- Improved early and ultimate strengths
- Excellent placement characteristics
- Improved rheology
- Improved durability
- Reduced segregation and bleeding
- Reduced drying shrinkage
- Reduced mix costs

#### PRODUCT INFORMATION

| <b>Chemical Base</b> | Modified Polycarboxylate  |
|----------------------|---|
| Packaging            | 1000L IBC   |
| Appearance / Colour  | Blue liquid   |
| Shelf Life           | 12 months from date of production if stored properly in undamaged containers.                           |
| Storage Conditions   | Store in dry conditions at temperatures between +5°C and +25°C. Protect from direct sunlight and frost. |
| Density              | 1.08 kg/l (at +20°C)  |

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| pH-Value                   | 4.3 +/- 1%  |
|----------------------------|---|
| Total Chloride Ion Content | Awaiting further testing  |
| TECHNICAL INFORMATION      |   |
| Specific Advice            | Alkali Content: Awaiting further testing Freezing Point: Awaiting further testing Air Entrainment: Negligible, minimal increase Effect of Setting: Minimal effect Effect of Overdosing: Increased workability and segregation |

#### APPLICATION INFORMATION

| <b>Recommended Dosage</b> | 0.8 - 2.0 by weight of cement   |
|---------------------------|---|
| Compatibility             | Sika® ViscoCrete®-650 MK 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 and advice about any specific combinations. |
| Dispensing                | <ul> <li>Sika® ViscoCrete®-650 MK should be dispensed through suitable calibrated dosing equipment.</li> <li>Sika® ViscoCrete®-650 MK is added to the gauging water or added with it into the concrete mixer.</li> </ul>                                      |

#### APPLICATION INSTRUCTIONS

### **Application Method / Tools**

- The standard rules of good concreting practice, concerning production and placing, are to be followed.
- Laboratory trials shall be carried out before concreting on site, especially when using a new mix design or producing new concrete components.
- Fresh concrete must be cured properly and curing applied as soon as possible.

#### **Notes on Application / Limitations**

- When using Sika® ViscoCrete®-650 MK a suitable mix design has to be taken into account and local material sources shall be trialled.
- Sika® ViscoCrete®-650 MK shall not be added to dry cement.
- Excessive water addition or overdosing may cause bleeding or segregation.
- Support from our Technical Service Department is recommended.
- Frost: If frozen and / or if precipitation has occurred, Sika® ViscoCrete®-650 MK may be used after thawing slowly at room temperature followed by intensive remixing.

#### **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. Please consult the local Product Data Sheet for the exact description of the application fields.

# **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.

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