

**BUILDING TRUST** 

## PRODUCT DATA SHEET Sikament<sup>®</sup>MG-5

Highly Effective Water-Reducer and Set Retarding Concrete Admixture

| PRODUCT<br>DESCRIPTION                                                        | Sikament®MG-5 is a chloride-free, highly effective Water-reducer and set<br>retarding concrete admixture that acts as: a higly efficient water-reduce<br>with an improved set retarding effect for the production of free flowing<br>concrete in hot climates. A substantial water reducing agent for promoting<br>high, early and ultimate strengths.                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                           |                                           |
|-------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
|                                                                               | <ul> <li>USES</li> <li>Sikament® MG-5 provides the following properties: <ul> <li>Workability especially where difficult placing conditions are encountered and to obtain dense concrete.</li> <li>A set retarding agent to maintain workability and extend the time allowed for pouring and compacting particularly in hot weather. E.g. ready-mix concrete pumped concrete, slip-forming concrete etc</li> <li>A Micro-Super-plasticizer for normal concrete B20, B25 and B30.</li> <li>Decreases the concrete permeability.</li> <li>Extended setting time.</li> <li>Suitable for hot weather concreting.</li> </ul> </li> <li>CHARACTERISTICS / ADVANTAGES</li> </ul> |                                                                                                                                                                                                                                                                                                                                                           |                                           |
|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <ul> <li>Increased setting times at elevated temperatures</li> <li>Long lasting control of slump loss.</li> <li>Reduced water without loss of workability.</li> <li>Improved workability without increased water content.</li> <li>Reduced shrinkage and creep. Improved surface finish.</li> <li>Increased strengths.</li> <li>Chloride free.</li> </ul> |                                           |
|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | TESTS                                                                                                                                                                                                                                                                                                                                                     | APPROVAL / STANDARDS<br>ASTM C494 Type G. |
|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | PRODUCT DATA                                                                                                                                                                                                                                                                                                                                              |                                           |
|                                                                               | FORM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | COLOR                                                                                                                                                                                                                                                                                                                                                     |                                           |
|                                                                               | Olive Brown                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                           |                                           |
| Product Data Sheet<br>Sikament®MG-5<br>03-15 VERSION. 3<br>Concrete Admixture | English/EMEA<br>Sika Near East s.a.l                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                           |                                           |
|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                           |                                           |

|                                         | PACKAGING                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         | Drums of 250 Kg                                                                                                                                                                                                                                                                                                              |
| STORAGE                                 | Bulks of 1100 Kg STORAGE CONDITIONS / SHELF-LIFE                                                                                                                                                                                                                                                                             |
| STURAGE                                 |                                                                                                                                                                                                                                                                                                                              |
|                                         | 12 months from date of production if stored properly in original unopened packaging in cool and dry conditions at temperatures between +5°C and +35°C. Protect from direct sunlight. Protect from humidity. Protect from Frost.                                                                                              |
| TECHNICAL DATA                          | DENSITY                                                                                                                                                                                                                                                                                                                      |
|                                         | 1.115 ±0.015 Kg/L                                                                                                                                                                                                                                                                                                            |
|                                         | РН                                                                                                                                                                                                                                                                                                                           |
|                                         | Around 10                                                                                                                                                                                                                                                                                                                    |
|                                         | CHLORIDE CONTENT                                                                                                                                                                                                                                                                                                             |
|                                         | Nil                                                                                                                                                                                                                                                                                                                          |
| System Information                      |                                                                                                                                                                                                                                                                                                                              |
| System Information APPLICATION DETAILS  | CONSUMPTION / DOSAGE                                                                                                                                                                                                                                                                                                         |
|                                         | 0.2%-2.5% by weight of cement                                                                                                                                                                                                                                                                                                |
|                                         | It is advisable to carry out trials mixes to establish the exact dosage.                                                                                                                                                                                                                                                     |
|                                         |                                                                                                                                                                                                                                                                                                                              |
|                                         | COMPATIBILITY                                                                                                                                                                                                                                                                                                                |
|                                         | Sikament®MG-5 is compatible with all types of Portland cements including<br>sulphate resistant cement. Also compatible with wide range of Sika®<br>products especially Type F products as Sikament® NN, Sikament® NN-LB,<br>Sikament® 163.                                                                                   |
|                                         |                                                                                                                                                                                                                                                                                                                              |
| APPLICATION INSTRUCTIONS                | DISPENSING                                                                                                                                                                                                                                                                                                                   |
|                                         | Sikament <sup>®</sup> MG-5 can be added to the mixing water prior to its addition to<br>the aggregates or directly to the freshly mixed concrete (the plasticizing<br>effect is more pronounced). The correct quantity of Sikament <sup>®</sup> MG-5 should<br>measure by means of a recommended dispenser.<br><b>CURING</b> |
|                                         | Fresh concrete must be cured properly, especially at high temperatures in order to prevent plastic and drying shrinkage. Use Sika® Antisol products as a curing agent or apply wet hessian.                                                                                                                                  |
|                                         | CLEANING OF TOOLS                                                                                                                                                                                                                                                                                                            |
|                                         | Clean all tools and application equipment with water immediately after use Hardened / cured material can only be removed mechanically.                                                                                                                                                                                       |
| 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<br>this product may vary from country to country. Please consult the local                                                                                                                                                                     |
| Product Data Sheet<br>Sikament®MG-5     | English/EMEA<br>Sika Near East s.a.l                                                                                                                                                                                                                                                                                         |
| 03-15, VERSION. 3<br>Concrete admixture |                                                                                                                                                                                                                                                                                                                              |
|                                         |                                                                                                                                                                                                                                                                                                                              |
| 2/3                                     | BUILDING TRUST                                                                                                                                                                                                                                                                                                               |



HEALTH AND SAFETY INFORMATION

**LEGAL NOTES** 

Product Data Sheet for the exact description of the application fields.

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.

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 practice, the differences in materials, substratum 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request

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Product Data Sheet Sikament®MG-5 03-15, VERSION. 3 Concrete admixture English/EMEA Sika Near East s.a.l



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