

PRODUCT DATA SHEET

Sikament® RB 561

(formerly MasterRheobuild® 561)

High range water-reducing admixture for concrete

DESCRIPTION

Sikament® RB 561 is a naphthalene sulphonate based high range water reducing / superplasticizer admixture that improves the early and final strengths of concrete by giving Rheoplastic property.

USES

- Concrete where high plasticity, normal-setting characteristics and accelerated strengths are desired
- Prestressed, precast and ready-mixed concrete applications
- Civil and mining applications

CHARACTERISTICS / ADVANTAGES

- Less dependence on consolidation energy
- Job time and cost reduced through higher productivity rates and/or educed labor
- Early strength allows for accelerated construction methods, resulting in completion dates ahead of schedule
- Engineering specification changes can allow for greater limits on the free-fall of concrete, lift heights, concrete temperatures and potential economic mixture adjustments.

Plastic State:

- 1. Controlled set times
- 2. Cohesive and non-segregating
- 3. Minimal bleed water

Hardened State:

- 1. Higher earlier strengths than can be achieved with conventional high-range
- 2. water reducers
- 3. Increased ultimate compressive strength
- 4. Higher modulus of elasticity
- 5. Improved bond strength to steel
- 6. Low permeability
- 7. High durability
- 8. Reduced shrinkage and creep
- 9. Highly reliable in-place structural integrity

APPROVALS / STANDARDS

EN - 934 - 2:2009

PRODUCT INFORMATION

Product Declaration	Admixtures generally go into reaction only with the binder. When the admixture is added to the concrete, it is absorbed by the particles of the binder. The particles of the binder push each other by electrostatic force. Thus, the desiredworkability is obtained by less amount of water. Proportional with the decrease of mixture's water amount, mechanic strength increases.
Composition	Naphthalene Sulphonate Based
Packaging	1000 kg IBC tankBulk delivery
Shelf Life	12 months if stored according to manufacturer's instructions in unopened container.
Storage Conditions	Store in original sealed containers and at temperatures between 5 °C and 35 °C. Store under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.
Appearance / Colour	Brown, liquid
Density	1.17–1.21 kg/l at 20 °C
Total Chloride Ion Content	≤ 0.10 (by mass)

TECHNICAL INFORMATION

Sikament® RB 561 is introduced into the mixer together with water. The plasticising effect or water reduction is higher if the admixture is added to the damp concrete after 80 % of the water has been added. The addition of Sikament® RB 561 to dry aggregate or cement is not recommended, as it lowers the plasticising effect or water reduction.

SYSTEM INFORMATION

Compatibility

Sikament® RB 561 can be used with all types of EN 197 Cements. For use with other special cements, contact with Sika Technical Services Department. Sikament® RB 561 should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing Sikament® RB 561 they must be dispensed separately.

Sikament® RB 561 is compatible and recommended for use with;

- SikaRapid® Series Hardening Concept for accelerated early strengths
- Sika® Stabilizer® Series to modify the viscosity of SCC.
- Sika® Separol, demoulding agents for easy formwork removal and improved finish.
- Sika® Antisol, curing compounds for highly efficient water retention. Sikament® RB 561 is not compatible with all admixtures of Sika® ViscoCrete® series. When such complimentary admixtures are required it is important that laboratory trials are performed, prior to any supply, to determine the respective dosages of any complimentary admixture, and the suitability, in the fresh and hardened state, of the resultant concrete. In these circumstances we recommend that you consult Sika Technical Services Department for further advice.



APPLICATION INFORMATION

Recommended Dosage

Sikament® RB 561 is suggested to be used as 0.8-2 kg for 100 kg binder. The dosage to be used must be determined beforehand by laboratory experiments according to concrete class and properties. Sika Technical Service Department must be consulted for detailed information.

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.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

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.

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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