

PRODUCT DATA SHEET

Sikament® RB 858 M

(formerly MRheobuild 858M)

A HIGH RANGE WATER-REDUCING SUPERPLASTICISING ADMIXTURE FOR RHEOPLASTIC CONCRETE PRODUCTION

DESCRIPTION

Sikament® RB 858 M is a highly effective water reducing dual action liquid superplasticiser that imparts excellent slump retention for prolonged periods. Sikament® RB 858 M increase workability and concrete strength significantly, particularly at early ages. Sikament® RB 858 M is a chloride free product. Suitable for use in hot and tropical climatic conditions.

USES

Sikament® RB 858 M can be used as a superplasticizer for the production of rheoplastic self-compacting concrete such as.

- Precast concrete.
- Low water/cement ratio concrete.
- Concrete requiring long slump retention period
- Slabs
- Foundations
- Walls
- Columns
- Piers
- Piles
- Slender components with dense reinforcement

TECHNICAL INFORMATION

Concreting guidance

The standard rules of good concreting practice for production and placing must be observed when using Sikament® RB 858 M in concrete. Refer to relevant standards. 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.

FEATURES

Sikament® RB 858 M provides the following properties:

As a Superplasticiser:

- Flowable concrete, with a low water / cement ratio.
- Concrete is placed easily
- Especially suitable for slender components with densely packed reinforcement
- Concrete requires less vibrating
- Improved cohesion of the concrete mix significantly reduces the risk of segregation and allows greater time for placement.

As a Water Reducer:

- Impressive water reduction capability
- Lower permeability concrete
- Lower shrinkage and creep
- Early strength development
- Final strength improvement

CERTIFICATES AND TEST REPORTS

Sikament® RB 858 M meets the requirements of ASTM C494; Type A & F and BS EN 934-2

PRODUCT INFORMATION

Composition	Sulphonated naphthalene
Packaging	210 L drum, 1000 L flowbin or bulk supply in tanker
Shelf life	12 months from date of production if stored properly
Storage conditions	Store in undamaged, unopened, original sealed packaging in dry conditions at temperatures between +5°C and +35°C. Mix well before using.
Appearance and colour	Dark brown colored liquid
Density	~1.22 kg/l (+25°C)
Total chloride ion content	Nil (BS EN 934-2)

APPLICATION INFORMATION

Recommended dosage	Sikament® RB 858 M is normally dispensed at a rate of 1.0 – 2.5 litres per 100 kg of cementitious materials. Other dosages may be used, depending on the mix design, raw materials, climatic conditions and concrete requirements. Trial mixes must be performed to establish the exact dosage rate required.
Dispensing	Sikament® RB 858 M is introduced into the mixer together with mixing water. The plasticizing effect or water reduction is higher if the admixture is added to the concrete after 50 - 70 % of the mixing water has been added. The addition of Sikament® RB 858 M to dry aggregate or cement is not recommended.
Compatibility	Sikament® RB 858 M is suitable for mixes containing all types of cement and supplementary cementitious materials such as: Microsilica (Silica Fume), Fly Ash (PFA), GGBS (ground granulated blast furnace slag) and the following Sika products: SikaPump®, Sika®FerroGard®, SikaFume®, SikaFiber®, Sika® Aer, Sika® Stabilizer, SikaControl® We recommend to perform trial mixes to establish the required performance when combining Sikament® RB 858 M with the above products or other admixtures. Please consult our Sika Technical Department for further assistance.

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

Before pouring, suitability tests on the fresh concrete must be carried out. With high workability mixes take special care that all formwork is properly installed and secured. If frozen and/or if precipitation has occurred, it may only be used after thawing slowly at room temperature and intensive mixing. When using Sikament® RB 858 M a suitable concrete mix must be designed for the local material sources and trial mixes performed to verify suitability. When accidental overdosing occurs the set retarding effect and workability increases along with bleeding. Additional air may also be entrained. During this period the concrete must be kept moist in order to prevent premature drying out.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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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ISO 9001, 14001, 45001 – SGS
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ISO 9001, 14001 – SGS
-Sika Saudi Arabia Limited
ISO 9001, 14001 – TÜV
-Sika MB Construction Chemicals LLC
-Sika Construction Chemicals for Manufacturing LLC
-Master Builders Solutions LLC

All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.



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