

PRODUCT DATA SHEET

SikaPlast® RMC 4

(formerly MasterPozzolith® RMC 4)

High performance retarding plasticiser for concrete

DESCRIPTION

SikaPlast® RMC 4 is a high-performance plasticising retarder, beneficial in maintaining workability especially in high ambient temperatures. Suitable for use in hot and tropical climatic conditions.

USES

- Ready mixed concrete where high workability retention and retardation are highly required.
- Hot weather concreting of all types.
- Pre-cast concrete

FEATURES

- Reduces segregation and bleeding
- Improves cohesion, workability and compactability in concrete using poorly graded/shaped fine aggregates.
- Reduces placing problems in hot weather by improved workability and workability retention in conjunction with extended setting times
- Improves surface finish
- Improves trowellability
- Reduces honeycombing / cold joint effects

CERTIFICATES AND TEST REPORTS

SikaPlast® RMC 4 follows the requirements of ASTM C494; Types B and D and EN 934-2

PRODUCT INFORMATION

Composition	Aqueous solution of modified carbohydrates
Packaging	210 L drums, 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 +50°C. Mix well before using.
Appearance and colour	Dark brown liquid
Density	~1.18 kg/l (+25°C)
Total chloride ion content	Nil (EN 934-2)

TECHNICAL INFORMATION

Concreting guidance

The standard rules of good concreting practice for production and placing must be observed when using SikaPlast® RMC 4 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.

APPLICATION INFORMATION

Recommended dosage

0.2 - 0.6 % by weight of binder

Other dosages by weight of binder can 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

SikaPlast® RMC 4 is added to the gauging water or simultaneously poured with it into the concrete mixer at the batching plant.

Do not add SikaPlast® RMC 4 directly to the dry mix.

The addition of the remaining gauging water (to fine tune concrete consistency) may only be started after two-thirds of the wet mixing time to avoid surplus water in the concrete.

Compatibility

SikaPlast® RMC 4 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:

Sikament®, SikaPump®, Sika®FerroGard®, SikaFume®, SikaFiber®, Sika® Aer, Sika® Stabilizer, SikaControl®

We recommend for trial mixes to be performed to establish the required performance when combining SikaPlast® RMC 4 with the above products or other admixtures. Please consult our Sika Technical Department.

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.
- Internal Reference: MBS_CC-UAE/ PI_RMC 4_06_94/v1/11_13/v2/11_19

IMPORTANT CONSIDERATIONS

- SikaPlast® RMC 4 should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing SikaPlast® RMC 4, they must be dispensed separately.
- When using SikaPlast® RMC 4 a suitable concrete mix must be designed for the local material sources and trial mixes performed to verify suitability.
- With high workability mixes take special care that all formwork is properly installed and secured.
- When accidental overdosing occurs the set retarding effect and workability increases. Additional air may also be entrained. During this period the concrete must be kept moist in order to prevent premature drying out. If properly cured, the ultimate strength of the concrete will not be adversely affected.

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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- Sika MB Construction Chemicals 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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