

# PRODUCT DATA SHEET

## Sikament<sup>®</sup> R2004

### HIGH RANGE WATER REDUCING AND SET RETARDING CONCRETE ADMIXTURE

#### DESCRIPTION

A highly effective super plasticizer with a set retarding effect for producing free-flowing concrete in hot climates. Also, a substantial water reducing agent for promoting high early and ultimate strengths.

#### USES

Sikament<sup>®</sup> -R2004 is used wherever high quality concrete is demanded under difficult placing and climatic conditions.

#### CHARACTERISTICS / ADVANTAGES

Sikament<sup>®</sup> -R2004 provides the following properties:

As a Super Plasticizer

-Substantial improvement in workability without increased water or the risk of segregation. Long lasting control of slump loss. No adverse effect on ultimate strengths.

As a water reducer

-Early strengths significantly increased. High ultimate strengths. Up to 20% water reduction. Especially suitable for hot climates. No excessive air entrainment.  
- No adverse shrinkage effect. Improved surface finish. Increased water tightness.

Chloride free-does not attack reinforcement.

#### APPROVALS / STANDARDS

It complies with ASTM C-494 Type G and BS 5075 Part 3.

#### PRODUCT INFORMATION

<b>Chemical Base</b>	Modified Synthetic Dispersion.
<b>Packaging</b>	5 and 20 kg pails 220 kg drums Bulk Tanks packing available upon request
<b>Appearance / Colour</b>	Brown liquid

<b>Shelf Life</b>	12 months from date of production if stored properly in undamaged and unopened original sealed packing.
<b>Storage Conditions</b>	Store in dry conditions, protected from direct sunlight and frost.
<b>Density</b>	(at 20°C) 1.200 (ASTM C-494)

## APPLICATION INFORMATION

<b>Recommended Dosage</b>	0.6 - 2.5 % by weight of cement. Exact dosage rates are dependent on the type of effect sought, quality of cement & aggregates, Water/Cement-ratio and ambient temperature. Therefore, it is advisable to carry out trial mixes.
<b>Compatibility</b>	Sikament® -R2004 is compatible with all types of Portland Cement, including S.R.C. When accidental overdosing occurs, the set retarding effect increases. During this period the concrete must be kept moist in order to prevent premature drying out.
<b>Dispensing</b>	<ul style="list-style-type: none"> <li>▪ Sikament® -R2004 can be added separately to the freshly mixed concrete or directly to the mixing water prior to its addition to the aggregates.</li> <li>▪ When added separately to the freshly mixed concrete, further mixing should take place for at least one minute per cubic meter.</li> <li>▪ Automatic and accurate dispensing equipment is available from Sika®.</li> </ul>

## 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.

## 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

- **Safety Precautions**  
Accidental splashes to the skin must be washed off with water and soap.  
Accidental splashes to the eyes or mucous membrane must be rinsed with clean warm water. Seek medical attention.
- **Ecology**  
Residues of material must be removed according to local regulations.  
Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.
- **Transport** Non-hazardous
- **Toxicity** Non-Toxic under relevant health and safety codes.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

## 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

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