**PRODUCT DATA SHEET**

**Retardan® L**

**RETARDER FOR CALCIUM SULPHATE BASED BINDERS**

### DESCRIPTION

Retardan® L is a high-performance set-retarder in liquid form for use with calcium sulphate (Gypsum) based binders.

### USES

Retardan® L provides excellent performance in the control and adjustment of setting times and workability with calcium sulphate based binders. The product is especially suitable for the following applications:

- Production of gypsum boards, fibreboards, blocks and elements
- Production of calcium sulphate based self-levelling screeds
- Manufacture of moulding, modelling and dental & medical plasters

### CHARACTERISTICS / ADVANTAGES

The characteristics and advantages of Retardan® L include:

- Highly effective set retarder for a variety of calcium sulphate based binder types
- Very efficient retardation, even at very low dosages
- Increased workability time for calcium sulphate based plasters and mortars up to several hours, depending on the dosage
- High retarding action over a wide pH range and/or high tolerance to changes in the pH-value
- Compatibility with other admixtures e.g. Sika®ViscoCrete® superplasticizers
- Retardan® L allows the preparation of large volume mixes and thus reduces the overall costs of the application
- No reduction in the final strength of gypsum based products (unlike with several fruit acid based retarders)
- Retardan® L reduces the risk of thermal cracking

### PRODUCT INFORMATION

<table>
<thead>
<tr>
<th>Chemical base</th>
<th>Polycondensated amino acid, Ca-salt, aqueous solution</th>
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<tbody>
<tr>
<td>Packaging</td>
<td>1’200 kg per IBC</td>
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<tr>
<td>Appearance / Colour</td>
<td>Red brown liquid</td>
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<tr>
<td>Shelf life</td>
<td>12 months shelf life from date of production if stored properly in undamaged, unopened, original sealed packaging. Note: Retardan® L may show a slight sedimentation at the bottom of the drum/container. The performance of the product, however, will not be affected. We recommend stirring of Retardan® L prior use.</td>
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<tr>
<td>Storage conditions</td>
<td>Dry storage at temperatures between 0°C and 40°C. Protect from direct sunlight, frost and contamination. Use clean drums/containers when delivered in bulk.</td>
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<tr>
<td>Density</td>
<td>approx. 1.2 g/cm³ at +20 °C</td>
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<tr>
<td>pH-Value</td>
<td>approx. 12 at +23 °C</td>
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</tbody>
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APPLICATION INFORMATION

Recommended Dosage
Dosage range for typical applications: 0.02 - 0.1 % by weight of binder.
Note: Differences in calcium sulphate binder type, raw material sources, calcining method, age and storage conditions of the binder and other conditions and factors at the plant and/or on-site can also influence the setting time of gypsum binders and therefore the dosage requirements of Retardan® L.
Preliminary testing is required to determine the exact dosage for specific applications and conditions. Please contact our Technical Services Department for any additional information and assistance.

Compatibility
Retardan® L may be combined with most commonly used gypsum additives such as superplasticizers, stabilizers and defoamers. In these combinations i.e. with Sika ViscoCrete superplasticizers, additional improvements in flow and retardation can also be achieved.
Important: Always conduct trials before combining products in specific mix designs and contact our Technical Service Department for any additional information about specific combinations with any other products.

Dispensing
Retardan® L is added to the gauging water.

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 declared data and recommended uses for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data and uses.

ECOLOGY, HEALTH AND SAFETY
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.

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.