

PRODUCT DATA SHEET

SikaRapid®-509 ID

ADVANCED SET ACCELERATING ADMIXTURE FOR CONCRETE

DESCRIPTION

SikaRapid®-509 ID are specialized chemical agents designed to expedite the early setting time of concrete by enhancing the rate of cement hydration. In cold weather conditions, where ambient temperatures slow down the setting process, these admixtures effectively counteract thermal-induced retardation, restoring setting times to optimal levels depending on dosage. This acceleration facilitates timely finishing operations, particularly in slab, rigid pavement, flooring applications, ensuring consistent performance across varying environmental conditions.

USES

- In colder temperatures and climates if earlier setting times are required to enable final finishing to take place.

- In tidal situations where concrete may be subjected to damaging wave action.
- For concrete where any time delays are critical, e.g. plant shut downs, pedestrian/traffic requirements, etc.
- For concrete applications requiring high early-age compressive and flexural strength to support accelerated construction schedules or early load-bearing capacity.

FEATURES

- SikaRapid®-509 ID can be used with all types of Portland cement, including sulphate resistant cement.
- Provides faster setting in colder conditions.
- Air Entrainment less than 1 %.
- SikaRapid®-509 ID contains chlorides.

PRODUCT INFORMATION

Composition	Water based liquid
Packaging	200 L non-returnable drums 1 000 L IBC
Appearance and colour	Yellowish to brownish
Shelf life	12 months from date of production if stored in undamaged and unopened, original sealed containers
Storage conditions	Store in dry conditions at temperatures between +10 °C and +35 °C. Protect from direct sunlight and

APPLICATION INFORMATION

Recommended dosage	Typical dosage: 0.5% - 2.5% (at +10 °C to +35 °C) by weight of cement. Dosage can be increased higher than the above depending on desired acceleration effect. Adjust water content of concrete mix accordingly.
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Compatibility

SikaRapid®-509 ID compatible with other Sika admixture.

But add separately, do not premix.

For more specific requirements, advice is available from our Technical Service Department to determine the usage rate for optimum results.

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

- Dosage will depend upon cement type, ambient temperature, early age curing regime and the particular effect desired. Tests should be conducted to determine the most effective dosage rate.
- When used in air entrained concrete, set accelerators will lower the air content by approximately 2%.
- Where concrete with a low cement content is being supplied, higher dosages should be used.
- Merely increasing cement content of concrete will not usually provide any useful set acceleration.
- Water contents affect setting times. The addition of 10 litres/m³ of water can increase final set times by up to 1 hour. Accordingly reducing water contents by using water reducers (Sikament or Viscocrete) in final set times.
- SikaRapid®-509 ID must not be diluted with water.
- As with all concrete and mortars, it is essential to protect mixes containing SikaRapid®-509 ID from water evaporation during the crucial early age curing period. We recommend the use of Sika Antisol curing membranes for this purpose. Refer Sika Antisol data sheet for information.
- Any stated performance criteria is based on extensive testing and historical data. However, all information relating to setting times and early age strength development should be regarded as indicative. Actual results may vary depending on conditions.
- High dosages of Sika accelerators may produce colour variations or patchiness of colour in the surface of hardened concrete.

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.

APPLICATION INSTRUCTIONS

DISPENSING

These products may be added to ready mixed concrete on arrival at the site, however a reduction in added water must be made during batching to compensate for the additional water in the admixture dosage.

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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Product Data Sheet

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