

BUILDING TRUST

PRODUCT DATA SHEET SikaRapid[®]-505 TH

SET ACCELERATING ADMIXTURE FOR CONCRETE

DESCRIPTION

SikaRapid[®]-505 TH are admixtures that accelerates the early setting times of concrete.Setting times for nonaccelerated concrete become longer as temperatures get colder. This affects finishing times of floors. The set accelerating admixtures counter this set retardation and can shorten setting times back to normal values (depending on dosage).

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.

PRODUCT INFORMATION

CHARACTERISTICS / ADVANTAGES

- SikaRapid[®]-505 TH can be used with all types of Portland cement, including sulphate resistant cement.
- Provides faster setting in colder conditions.
- SikaRapid[®]-505 TH can be used in reinforced concrete.
- SikaRapid[®]-505 TH assist in reducing the water : cement ratio in concrete while still maintaining workability.
- Air Entrainment less than 1 %
- SikaRapid[®]-505 TH contains chlorides

Composition	Water based liquid
Packaging	200 L non-returnable drums 1000 L IBC
Appearance / Colour	Brownish
Shelf life	12 months from date of production if stored in undamaged and unopened, original sealed containers
Storage conditions	Store in dry condition and protected from direct sunlight at temperatures below +25 °C.
Density	1.300 - 1.450 kg/L (at +25 °C)

Recommended dosage	Depending on desired acceleration effect, 0.5% - 1.5% (at +15 °C to +20 °C)
	by weight of cement.
	Adjust water content of concrete mix accordingly.

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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.

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[®]-505 TH must not be diluted with water.
- As with all concrete and mortars, it is essential to protect mixes containing SikaRapid®-505 TH 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

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.

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

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.

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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