

## PRODUCT DATA SHEET

# Sika® Set Accelerator

### Ac – Set Accelerator

#### DESCRIPTION

Sika® Set Accelerator is a calcium-chloride based admixture used to reduce the setting time of concrete.

#### USES

Sika® Set Accelerator can be used to reduce concrete setting times and improve early strength development and is useful in the following applications:

- Reduction of setting time during cold-weather concrete work.
- Emergency concrete repairs where early strength is necessary.
- Improve setting time and early strength for fast-track construction.
- Improve setting time and early strength for precast concrete products.

Note: The use of Sika® Set Accelerator will increase the calcium-chloride content of concrete. Precautions must be taken to ensure the chloride content of reinforced or prestressed concrete does not exceed the chloride limits imposed by AS 1379 and other relevant construction standards.

#### PRODUCT INFORMATION

<b>Composition</b>	Liquid solution of calcium chloride
<b>Packaging</b>	Bulk deliveries 205 litre drum 10 litre container
<b>Shelf life</b>	Stored at temperatures between 5°C and 35° C in unopened original containers protected from direct sunlight, shelf life is at least one (1) year.
<b>Storage conditions</b>	Store at temperature between 5°C and 35°C, protected from the direct sunlight.
<b>Appearance and colour</b>	Clear to cloudy liquid.
<b>Specific gravity</b>	1.33 g/cm <sup>3</sup>
<b>Total chloride ion content</b>	1000 ml contains approx. 330 g chloride ion.

#### CHARACTERISTICS / ADVANTAGES

The advantages of Sika® Set Accelerator are:

- Reduced initial setting time of concrete.
- Improved early strength development of concrete.
- Reduction of delays due to cold weather.
- Reduction of concrete bleed (due to faster set)
- Earlier stripping times.

#### APPROVALS / CERTIFICATES

Sika® Set Accelerator meets and exceeds all requirements of Australian Standard 1478.1-2000 Set-accelerating Admixture (Ac)

## Recommended dosage

Typical dosage is between 1000 and 2000 ml per 100 kg of total cementitious material. Optimum dosage should be determined by site trials. Dosages outside the typical range can be used. Trials should be carried out to confirm performance.

As ambient and concrete temperatures reduce an increase in the dose rate of Sika® Set Accelerator may be necessary in order to maintain performance.

At very low temperatures (typically below 5°C), other precautions may be necessary in order to ensure concrete sets. Precautions may include heating water or aggregates etc.

## Dispensing

Sika® Set Accelerator should ideally be dispensed with the batch water. Sika® Set Accelerator should not be dispensed directly onto dry cementitious materials.

Sika® Set Accelerator can be added to concrete after mixing, but concrete should then be thoroughly mixed before being discharged. (Minimum of 1 minute/m<sup>3</sup> mixing at full speed).

## Compatibility

When using with other admixtures check compatibility first.

When using Sika® Set Accelerator laboratory and site trials are recommended.

## 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.

## FURTHER INFORMATION

Sika® Set Accelerator can significantly reduce concrete setting times. Long haulage distances/times, increased temperatures and high dose rates will significantly increase the risk of concrete setting during transit. For additional information, please contact your local Sika Representative.

## IMPORTANT CONSIDERATIONS

When used in the typical dose range the chloride content may exceed the chloride limits allowed in the Australian Standards for reinforced or prestressed concrete. Sika's chloride-free accelerators should be considered for use in these cases.

## 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 Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the technical data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

## LEGAL NOTES

The information, and, in particular, the recommenda-

tions 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.