

PRODUCT DATA SHEET

Sika® Plastiment®-555

(formerly MasterPozzolith® 555)

Non-chloride accelerating admixture

DESCRIPTION

Sika® Plastiment®-555 is a ready-to-use liquid admixture formulated to accelerate the setting time of concrete under cool winter conditions and to produce high-early strength in special application concrete. It does not contain added chloride and conforms to the most stringent chloride ion limits required by concrete industry standards

USES

All types of concrete where a non-chloride type accelerator is beneficial:

- cold weather concreting
- concrete subject to chloride ion constraints such as high rise buildings in coastal environments
- concrete placed on galvanised steel floor and roof systems which are left in place
- precast concrete – either pre-tensioned or post tensioned
- concrete pipes and other manufactured concrete products such as tiles and blocks
- concrete highway and bridge construction

FEATURES

Concrete with Sika® Plastiment®-555 admixture has a significantly faster setting time than plain concrete. Increasing the dosage rate increases set acceleration. Both the compressive and the flexural strengths of concrete with Sika® Plastiment®-555 develop, more rapidly than with plain concrete.

Benefits to concrete construction and to the manufacture of concrete products because of this earlier setting

and and strength gain in cold weather include:

- earlier finishing of slabwork without the need for calcium chloride
- more efficient scheduling, generally faster construc-

tion and earlier occupancy

- earlier stripping and re-use of forms for walls, precast work and other fast-track construction
 - earlier structural use of concrete such as tiltslab, paving, floors, car-park
- potential energy savings in steam cured concrete (precast, prestressed, blocks) by reducing curing temperatures and/or steaming time necessary to reach desired transfer strengths

CERTIFICATES AND TEST REPORTS

Sika® Plastiment®-555 meets and exceeds AS 1478.1 Type Ac and ASTM C494 Type C requirements.

PRODUCT INFORMATION

Packaging	Sika® Plastiment®-555 is available in 20L and 1000 litre IBCs or in bulk
Shelf life	12month from the date of production, stored in an unopened packaging.
Storage conditions	Sika® Plastiment®-555 must be stored where temperatures do not drop below +5°C. If product has frozen thaw and agitate until completely reconstituted. Store under cover, out of direct sunlight and protect from extremes of temperatures
Appearance	Opaque liquid
Specific gravity	1.3 at 25°C
Flash point	None
pH-Value	4.5
Recommended dosage	Sika® Plastiment®-555 contains no added chlorides which means it will not initiate or promote the corrosion of reinforcing steel. Sika® Plastiment®-555 is used over a wide dose range of 300 to 1300 mls and above per 100kg of cementitious material. The dosage rate is dependent on the ambient concrete temperatures, cement chemistry and the amount of acceleration required. The degree of set-acceleration increases with dose rates, allowing concrete producers to control the setting rate of their product. Where mild acceleration with improved workability and finishing characteristics is required, use at 300-500 mls per 100kg in conjunction with a low dose of a normal setting admixture such as 300mls per 100kg of a Sika plasticizer. Where greater acceleration, under extremely cold conditions or where rapid setting is required, use at 600 to 1300 mls per 100kg cementitious content.
Compatibility	Sika® Plastiment®-555 can be used with air entraining admixtures and other Sika admixtures to achieve cost-effective customised concrete performance. However, admixtures should be added separately to initial batching water to ensure complete distribution throughout the mix. Sika® Plastiment®-555 should not be used in conjunction with other admixtures supplied by other manufacturers unless specific test information is available.

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.

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.

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.

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