

# PRODUCT DATA SHEET

## SikaPlast®-4201 NS

### HIGH EFFICIENT SUPERPLASTICIZER

#### DESCRIPTION

SikaPlast®-4201 NS is the latest development of superplasticizer for concrete. It meets the requirements for high range water reducing superplasticizers

#### USES

SikaPlast®-4201 NS is a unique multipurpose superplasticiser that is particularly suitable for the production of ready mixed concrete. Additionally it provides high water reduction and improved fresh concrete characteristics.

With its outstanding cost / performance SikaPlast®-4201 NS is used for the following:

- A wide range of applications where excellent workability is required
- Concrete with high water reduction
- High efficient concrete applications
- Variable use in different concrete systems with different raw materials

#### CHARACTERISTICS / ADVANTAGES

SikaPlast®-4201 NS is a powerful superplasticiser based on advanced technology which gives the following advantages:

- Strong water reduction, resulting in high density, high strength and reduced permeability
- Less sensitive against variations in aggregates and / or different cement types
- High efficiency even at low dosage rates
- Extended workability in conjunction with subsequent strength development
- Superior plasticising effect, resulting in improved flow, placing and compaction characteristics

#### APPROVALS / STANDARDS

IS 9103-1999, ASTM C494

#### PRODUCT INFORMATION

<b>Chemical Base</b>	Modified Polycarboxylate
<b>Packaging</b>	255 kg HDPE carboy or Tanker supply.
<b>Appearance / Colour</b>	Light Brown Liquid
<b>Shelf Life</b>	12 months from date of production if stored properly in undamaged unopened, original sealed packaging
<b>Storage Conditions</b>	Store in dry conditions at temperatures between +10°C and +40°C. Protect from direct sunlight and frost.
<b>Density</b>	~1.05 kg/l at 25°C
<b>pH-Value</b>	≥ 6

## APPLICATION INFORMATION

<b>Recommended Dosage</b>	0.5 % to 2.0 b. w. o. c. Optimum dosage has to be finalized through site trials. And also if any Air entraining admixture is used separately then the dosage should be adjusted by site trial. Stir well before use.
<b>Compatibility</b>	SikaPlast®-4201 NS may be combined with many other Sika® products. Important: Always conduct trials before combining products in specific mixes and combinations. Compatible with all types of cement and cementitious materials.

## APPLICATION INSTRUCTIONS

### DISPENSING

SikaPlast®-4201 NS is added to the gauging water or added with it into the concrete mixer. To take advantage of the high water reduction, a wet mixing time, which is depending on the mixing conditions and mixer performance, of at least 60 seconds is recommended. To avoid excess water in the concrete, the final dosage must begin only after 2/3 of the wet mixing time.

### LIMITATIONS

When using SikaPlast®-4201 NS a suitable mix design has to be taken into account and local material sources shall be trialled.

SikaPlast®-4201 NS shall not be added to dry cement. Excessive water addition or overdosing may cause bleeding or segregation.

Frost:

If frozen and / or if precipitation has occurred, SikaPlast® 4201 NS may be used after thawing slowly at room temperature followed by intensive remixing.

### 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

## ECOLOGY, HEALTH AND SAFETY

## 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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