

# PRODUCT DATA SHEET

# Sika® Silicoll P unkompaktiert

Silica FUME in powder form as inorganic concrete additive

#### **DESCRIPTION**

Sika® Silicoll P unkompaktiert is a highly fine, pozzolana additive for the production of dense and durable concrete according to DIN 1045.

#### **USES**

- For mortar and concretes, where high strength and durability, high impermeability to water and chemicals should be promoted
- In the production of high-performance sprayed concrete with increased demands on sealing, application thickness and rebound reduction

## **CHARACTERISTICS / ADVANTAGES**

Sika® Silicoll P unkompaktiert is a fine grain, largely amorphous silica fume, which reacts like pozzolana cement.

Therefore Sika® Silicoll P unkompaktiert causes in concrete:

- Reduction in the tendency for bleeding
- Improving the binding between cement paste matrix and aggregate grains
- Increases the strength and reduction of abrasion
- Reduction of porosity through reaction with cement constituents
- Reduced rebound with sprayed concrete
- Improved green strength with stiff concrete
- Reduces the tendency for efflorescence
- Increases the resistance to freezing/thawing and deicing salts
- Improvement of the chemical resistance

#### **APPROVALS / CERTIFICATES**

Complies with DIN EN 13263-1, Class 1.

#### PRODUCT INFORMATION

Composition	Amorphous silica
Packaging	Sack: 20 kg, 660 kg shrink-wrapped on Euro deposit pallet
Appearance / Colour	Powder / Grey
Shelf life	Minimum of 1 year shelf life in sealed containers.
Storage conditions	Store dry like cement. When supplied use clean containers.
Density	2.2 g/cm <sup>3</sup>
Bulk density	approx. 0.20 g/cm³

Specific advice	18 - 22 m <sup>2</sup> /g (BET)

#### PRODUCT DATA SHEET

Sika® Silicoll P unkompaktiert September 2021, Version 01.01 021403031000000079

#### APPLICATION INFORMATION

Recommended dosage	11% of the cement weight	
Compatibility	Sika® Silicoll P unkompaktiert must be simultaneously added with the cement.	
	To reduce the increased water demand, utilise Sika Superplasticizer e.g. Sika® ViscoCrete®-1035.	
	The required mixing time after the addition is dependent on the mixer and must be sufficiently dimensioned.	
Dispensing	An initial test according to DIN EN 206-1/DIN 1045-2 is required before use.	

#### **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**

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.

#### 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 the 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.

#### Sika Deutschland GmbH

Concrete

Peter-Schuhmacher-Straße 8

69181 Leimen

Telefon: +49 06224 988-04 Telefax: +49 06224 988-522 EMail: leimen@de.sika.com



PRODUCT DATA SHEET Sika® Silicoll P unkompaktiert September 2021, Version 01.01 021403031000000079

SikaSilicollPunkompaktiert-en-DE-(09-2021)-1-1.pdf

