

PRODUCT DATA SHEET

Sikacrete® PP1

MINERAL ADMIXTURE

PRODUCT DESCRIPTION

Sikacrete® PP1 is a concrete admixture of the new generation in powder form, based on the Sika Silica Fume Technology.

USES

Sikacrete® PP1 is used in structural concrete, precast processes, and other fields of concrete constructions to increase the density, durability and compressive strength of concrete.

CHARACTERISTICS / ADVANTAGES

Sikacrete® PP1 contains extremely fine (0.1 µm) latently reactive silicone dioxide. The presence of this substance gives greatly improved internal cohesion and water retentivity. The concrete becomes extremely soft and the pumping properties are substantially improved. In the hardened concrete the latently reactive silica fume forms a chemical bond with the free lime. The additional crystal formation produces a significantly more dense cement matrix.

Sikacrete® PP1 is used in combination with Sikament® superplasticizer, the performance characteristics of concrete will be improved in the following ways :

- Increased workability over a longer period of time
- Green concrete exhibits excellent stability
- Durability is greatly increased
- Water permeability of set concrete is much reduced
- Vapour permeability is much decreased
- High resistance to carbonation
- Infiltration of chlorides is very much reduced
- Very high early and ultimate strengths
- Reduced deterioration of migration due to chloride and sulphate reaction

Sikacrete® PP1 does not contain chlorides, nor other potentially corrosive substances. It, therefore can be used with complete safety in steel or fibre-reinforced and prestressed concrete.

PRODUCT INFORMATION

Chemical Base	A latently hydraulic blend of active ingredients
Packaging	25 kg/ bag
Appearance / Colour	Grey Powder
Shelf Life	12 months from the date of production If stored properly in undamaged, original, sealed packaging.
Storage Conditions	Keep in dry condition and protected from direct sunshine.
Bulk Density	0.60 ± 0.1 kg/L

TECHNICAL INFORMATION

Specific Advice

Concrete modified with Sikacrete® PP1 should be placed in the same way as normal concrete of moderate to high-slump consistency. Where Sikacrete® PP1 is used, the concrete mix must be prepared and placed in accordance with the standard rules of high durability concrete practice, and proper curing procedures must be initiated immediately after placement.

APPLICATION INFORMATION

Recommended Dosage

5-10% by weight of cement.

Dispensing

Sikacrete® PP1 is added to the dry ingredients at the batching/mixing plant prior the adding of the gauging water. A mixing time of 90 seconds is recommended to ensure uniform dispersion of Sikacrete® PP1 throughout the mix. The amount of water added should be adjusted according to the dosage of Sikacrete® PP1, Sikament® and the final required consistency. Other Sika concrete admixtures might be incorporated as well, if required for special performance characteristics.

VALUE BASE

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

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

LIMITATIONS

Sikacrete® PP1 is a product designed for use for special purpose concretes (such as waterproof/high durability concrete). For advice on specific applications, please consult our Technical Department.

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.

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