

PRODUCT DATA SHEET

Sika® Intraplast®-100 ZA

Expanding grout admixture

DESCRIPTION

Sika® Intraplast® -100 ZA admixture is designed to introduce micro bubbles into the mix, thereby creating wet volume expansion and increase fluidity without segregation.

USES

Sika® Intraplast® -100 ZA is used to increase cohesion in cement grouts (the addition of sand is possible), it is suitable for applications such as grouting of:

- Pre-stressed cable ducts
- Rock and soil anchoring
- Bearing plates
- Tunnel linings
- Fine honeycombing

CHARACTERISTICS / ADVANTAGES

- Improved fluidity
- Increased cohesion
- Economical
- Volume expansion in the wet state
- Chloride free

PRODUCT INFORMATION

Chemical Base	Ligno- sulphonate, carbonates and additives
Packaging	1kg and 25kg bags
Shelf Life	12 months in original, unopened container.
Storage Conditions	Store in dry, cool area between 5°C and 35°C. Protect from direct sunlight.
Appearance / Colour	Pale Brown Powder
Density	1.2 Kg / litre

TECHNICAL INFORMATION

Concreting Guidance	Place the grouting material within 15 minutes of mixing to gain the full benefit of the expansion process. The normal means of placing and pumping of grouting material should be used to ensure a continuous flow. It is not recommended to add sand for pre-stressed concrete work.
Concrete Mix Design	Add directly to the cement and water slurry and mix in well. Sand may be added as required. (See Mix Design Guide below) For pre-stressed concrete work, where mechanical batching is carried out, a mixing time of 4 minutes with a w/c ratio of 0.36 to 0.40 has been found to give the best results. The most effective mixing procedure has proven to be; water, cement and finally Intraplast®-100 ZA . (Cements containing fly ash are unsuitable) Mix Design Guide: Cement grout: 50kg OPC/RHPC + 18-20L Water +1kg bag Intraplast®-100 ZA = (35 litres approx. yield) Cement/Sand grout: 50kg OPC/RHPC + 1 wheelbarrow sand (65L/90Kg) + 20-24L Water +1kg bag Intraplast®-100 ZA = (69 litres approx. yield) Cement/Sand grout: 50kg OPC/RHPC + 1.5 wheelbarrow sand (98L/134Kg) + 22-25L Water +1kg bag Intraplast®-100 ZA = (88 litres approx. yield) If high early strength is required, rapid hardening Portland cement should be used. For a Cement/Sand grout - only Clean Concreting Sand should be used.
Recommended Dosage	2% by weight of cement (1kg Sika® Intraplast®-100 ZA per 50kg cement).
Dispensing	When grout containing sand is to be used the following mixing sequence should be used: Sand – Cement – Sika® Intraplast®-100 ZA - Water . For pre-stressing concrete work where batching of the admixture is done in the usual mechanical way, a mixing time of 4 minutes together with a w/c ratio of 0.4 – 0.45 are found to be satisfactory. Generally the most suitable mixing sequence is: Water – Cement – Sika® Intraplast®-100 ZA Mixing time of Sika® Intraplast® -100 ZA : Mix for at least 4 minutes after ingredients have been added.
Compatibility	<ul style="list-style-type: none">▪ Sika® Intraplast®-100 ZA is essentially a product for use by specialists working in the field of pre-stressing and grouting techniques.▪ It is known that the properties of the injection aid can be significantly influenced by the mixing procedure, cement properties, addition of water, sand and temperatures.▪ For important work it is necessary to determine the most suitable procedure by means of preliminary site tests.

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.

ECOLOGY HEALTH AND SAFETY

LOCAL RESTRICTIONS

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

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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