

Intraplast® Z/ EP, Intracrete® EH

Expanding Grout Admixture

Product Description A range of expanding grout admixtures. By introducing micro bubbles into the mix, wet volume expansion and increased fluidity without segregation is produced. Suitable for tropical and hot climatic conditions.

Uses **Intracrete® EH** and **Intraplast® Z** are used to increase cohesion in cement grouts (addition of sand is possible). **Intraplast® EP** has a built in superplasticiser. **Intraplast® Z** and **Intraplast® EP** develop hydrogen, whereas **Intracrete® EH** develops nitrogen gas. In general all 3 products can be used for grouting of:

- Pre-stressed cable ducts
- Rock and soil anchoring
- Bearing plates
- Pre-placed aggregates
- Tunnel linings

Advantages **Intracrete® EH**, **Intraplast® Z** and **Intraplast® EP** provide the following properties:

- Improved fluidity
- Increased cohesion
- Volume expansion in the wet state
- **Intraplast® EP** permits a good reduction in water demand

Test Report Test Report AI Futtain Tarmac, No. AT 5514A.
Complies with BS 8110: Part 1.

Product Data

Type Blend of organic and inorganic chemicals

Form	Intraplast® Z	Intraplast® EP	Intracrete® EH
	Beige powder	Brown powder	Beige powder

Packaging Box of 20 x 1 kg bags
10 kg bags

Storage Condition Store in moisture tight, closed and undamaged original containers at temperatures between + 5°C and + 35°C away from direct sunlight.

Shelf life 12 months minimum from production date if stored properly in original unopened packaging.

Technical Data

Dosage	Intraplast® Z	Intraplast® EP	Intracrete® EH
	2% bwc	1% bwc	2% bwc



Density	Intraplast® Z 0.7 kg/lit	Intraplast® EP 1.2 kg/lit	Intracrete EH 1.2 kg/lit						
Chloride Content	Nil (EN934)								
Physical Properties	Examples of properties of cement pastes containing 2% of Intracrete® EH								
	OPC (used)	w/c ratio	Flow-Cone Test [sec.] ⁽¹⁾		Bleed water	Volume Expansion	Temperature [°C]		Strength 28 days
			0'	30 min.	[%] ⁽¹⁾	[%] ⁽¹⁾	Water	Grout	[MPa]
	Cement 1	0.42	12	19	1.1	2.7	18	22	41.5
	Cement 2	0.40	16	21	0.75	2.4	20	23	45.0
	(1) Test complying with BS 8110:Part 1								
Application									
Dispensing	Add directly to the cement / water grout mix in the mixer. In the case of Intracrete® EH and Intraplast® Z sand may be added as required. The most effective mixing sequence for a lump free homogeneous grout has proven to be water, cement and finally the admixture.								
Application:	Mix cement, water and admixture by slow speed mixer for at least 3 minutes and until a homogeneous, lump free liquid mix is obtained. Allow air bubbles to escape. Grout from one side and allow the air to escape from the other side. Do not interrupt grouting. Maintain sufficient head of pressure.								
Remarks	For pre-stressed concrete work, where mechanical batching is carried out, a time of 4 minutes with a Water:Cement ratio of 0.36 - 0.40 has been found to give the best results. Initial trials with the materials to be used, or when changing materials, are always recommended. Grouts must exhibit a minimum of bleeding. In hot summer temperatures: <ul style="list-style-type: none"> ■ use chilled water for mixing. ■ saturate ducts with chilled water prior to grouting. ■ pump grout immediately after duct saturation ■ condition materials at room temperature before use. The use of Sikament or Plastiment admixtures will help extend fluidity of Intraplast® Z / Intracrete® EH (Contact Sika Technical Services Department For further details) Cements containing fly ash are unsuitable.								
Notes	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.								
Safety	For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.								

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 should 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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