BUILDING TRUST

PRODUCT DATA SHEET

SikaPlast®-344 X1 TP

High efficient superplasticizer

DESCRIPTION

SikaPlast®-344 X1 TP is the latest development of superplasticizer for concrete. It meets the requirements for high range water reducing superplasticizers.

USES

SikaPlast®-344 X1 TP 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®-344 X1 TP is used for the following:

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

CHARACTERISTICS / ADVANTAGES

SikaPlast®-344 X1 TP 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

Conforms to IS 9103 / ASTM C494

PRODUCT INFORMATION

Chemical base	Aqueous solution of modified polycarboxylates
Packaging	255kg drum/Bulk supply
Appearance / Colour	Brown liquid
Shelf life	12 months from date of production
Storage conditions	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +10 °C and +40 °C. Protect from direct sunlight and frost. Always refer to the packaging. Frost: If frozen or if precipitation has occurred, the Product may be used after thawing slowly at room temperature and intensive mixing.
Density	~1.11 kg/l at 25°C
pH-value	≥6

TECHNICAL INFORMATION

Concreting Guidance	▪ Follow the standard rules of good concreting practice for both production and placement. ▪ Carry out laboratory trials before concreting on site, especially when using a new mix design or producing new concrete components. ▪ Carry out trials to confirm the flowability and workability of the concrete. ▪ Cure fresh concrete properly and apply curing as early as possible, particularly in hot, windy and dry conditions, as well as at low temperatures.
Specific Advice	▪ Excessive water addition or overdosing may cause bleeding, segregation and extension of setting-times. ▪ Due allowance should be made for the effect of fluid concrete pressure on formwork, and stripping times should be monitored. ▪ The product ensures that the concrete remains workable for a certain period. Workability loss depends on the following aspects: - temperature, - type of cement, - nature of aggregates, - method of transport, - and initial workability. ▪ To achieve longer workability period please use a setting retarder from the Sika® Retarder series.

APPLICATION INFORMATION

Recommended Dosage	0.2 % to 2% b. w. o. cementitious. Optimum dosage has to be finalized through site trials. Stir well before use.

SYSTEM INFORMATION

Compatibility	SikaPlast®-344 X1 TP may be combined with many other Sika® Products. Compatible with all types of cements and cementitious materials. Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information about specific combinations.

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

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

DISPENSING

SikaPlast®-344 X1 TP can be added into the mixing water or directly into the concrete mixer after 50% – 70% of the mixing water has been added.
The addition of SikaPlast®-344 X1 TP to dry aggregate or cement is not recommended.
To achieve optimum performance a minimum wet mixing time, which is depending on the mixing conditions and the mixer performance, of 60 seconds is recommended.

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 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 India Pvt. Ltd.
620, Diamond Harbour Road
Commercial Complex II
Kolkata - 700 034
West Bengal, India

Contact:
Phone: +91 33 2447 2448
Fax: +91 33 2397 8688
info.india@in.sika.com
www.sika.in