

PRODUCT DATA SHEET

SikaPlast®-2024 NS BD

Retarding Superplasticiser based on PCE for Ready-Mix Concrete

DESCRIPTION

SikaPlast®-2024 NS BD is an economical admixture based on modified polycarboxylate ether. The product has been primarily developed for applications in ready mix and site-batched concrete. SikaPlast®-2024 NS BD is specially designed to allow considerable reduction of mixing water while maintaining control on extend of set retardation.

SikaPlast®-2024 NS BD is free of chloride & low alkali. It is compatible with all types of cements.

USES

- Ready-mixed & Site mix Concrete
- Long-distance transporting
- Pumped concrete
- High workability without segregation or bleeding
- High-performance concrete for durability
- Congested/complex reinforced sections
- Mixes requiring >20% water reduction

FEATURES

- Good dispersion even in mixes with high cementitious fines
- High workability for long periods
- Lower pumping pressure
- Resistance to segregation even at high workability
- Longer workability with extended setting
- Reduced water content for a given workability
- Higher ultimate strengths
- Increased ease in finishing concrete
- Water reduction up to 20-30% depending on dosage*
- 28 days strength improved by up to 30%*
- * This will depend on dosage and mix design

CERTIFICATES AND TEST REPORTS

Complies with ASTM C494 Types B, D & G, EN 934-2 T3.1/3.2, IS 9103 & IS 2645

PRODUCT INFORMATION

Composition	Modified Poly-Carboxylate Ether (PCE)
Packaging	SikaPlast®-2024 NS BD is supplied in 230 Kg, 1000 Kg or bulk on request.
Appearance and colour	Light brown liquid
Shelf life	12 months from date of production if stored properly in undamaged unopened, original sealed packaging.
Storage conditions	Store in dry conditions at temperatures between $+10^{\circ}$ C and $+40^{\circ}$ C. Protect from direct sunlight and frost.
Density	~1.08 kg/l at 25°C
pH-Value	≥ 6
Total chloride ion content	Nil

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APPLICATION INFORMATION

Recommended dosage

Optimum dosage of SikaPlast®-2024 NS BD should be determined with trial mixes. As a guide, a dosage range of 400ml to 2000ml per 100kg of cementitious material is normally recommended. Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of the recommended range may be required. In such cases, contact your local Sika representative.

Effects of over dosage

A severe over-dosage of SikaPlast®-2024 NS BD can result in the following:

- Reduced permeability
- Long extension of initial and final set
- Increase in air entrainment
- Bleed/segregation of mix, quick loss of workability
- Increased plastic shrinkage

A slight overdosing may not adversely affect the ultimate strength of the concrete and can achieve higher strengths than normal concrete, provided it is properly compacted and cured. Due allowance should be made for the effect of fluid concrete pressure on form work, and stripping times should be monitored.

In the event of over dosage consult your local Sika representative immediately.

Compatibility

SikaPlast®-2024 NS BD may be combined with many other Sika® Products. Compatible with all types of cement 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 Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

DISPENSING

SikaPlast®-2024 NS BD is a ready-to-use liquid which is dispensed into the concrete together with the mixing water. The plasticizing effect and water reduction are higher if the admixture is added to the damp concrete after 50 to 70% of the mixing water has been added.

CLEANING OF EQUIPMENT

Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be mechanically removed.

LOCAL RESTRICTIONS

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