

PRODUCT DATA SHEET

Sika® AirPRO (SE) 20%

Air-entraining concrete admixture

DESCRIPTION

Sika® AirPRO (SE) 20% is a whitish transparent liquid, based on synthetic surfactant and pine oil derivatives. Sika® AirPRO (SE) 20% forms a stable air pore system in the concrete cement paste. The air pores act as expansion vessels as the moisture / water in the hardened concrete expands during freezing. The air pores also make the concrete easy to work and smooth.

USES

Sika® AirPRO (SE) 20% used in concrete to increase frost resistance in structures exposed to freeze / thaw cycles. Sika® AirPRO (SE) 20% is also used to increase the transport stability of the concrete and provide improved casting properties such as reduced risk of bleeding and separation.

PRODUCT INFORMATION

Packaging	IBC 1000 kg
Appearance / Colour	Transparent liquid
Shelf life	9 months from date of production.
Storage conditions	Storage temperature between +5°C and +35°C. Protect from direct sunlight and frost. Use clean tanks for storage. These should be cleaned and disinfected at least once a year. Stirring must be done mechanically or with round pumping. Avoid air blowing.
Density	1,00 ± 0,02 kg/dm ³
pH-Value	9,5 ± 1
Conventional dry material content	1,05 ± 0,105 weight-%
Viscosity	Easy flowable liquid
Total chloride ion content	<0,10 % by weight
Equivalent sodium oxide	<0,9 % by weight

CHARACTERISTICS / ADVANTAGES

Sika® AirPRO (SE) 20% produces small air bubbles that are the size that are most effective in reducing frost damage to concrete.

- Expansion space for freezing water
- Reduced suction of capillary pores
- High resistance to freezing / thawing and de-icing salts
- Reduced capillary water absorption
- Improved rheology

APPROVALS / CERTIFICATES

CE Marking and Declaration of Performance to EN 934-2 - Admixtures for concrete, mortar and grout.
- Air entraining admixture

TECHNICAL INFORMATION

Concreting guidance

- Sika® AirPRO (SE) 20% is added to the concrete with the mixing water. For accurate dosing, automatic dosing equipment for weight or volume dosing is recommended.
- The air pore formation is dependent on the concrete temperature.
- Within the range of +10°C - +30°C the effect decreases slightly with increased temperature.
- Air pore formation is also affected by factors such as the gradation and grain shape of the ballast, the content of fine material (<0,25 mm), the consistency of the concrete mass and the mixing time.
- To compensate for the loss of strength caused by the elevated air content, use of water reducing agent is recommended, e.g. ViscoCrete®.

Concrete mixing time

The recommended mixing time is 90-180 sec depending on the mixer type.

APPLICATION INFORMATION

Recommended dosage

Approx. 0,05-1,00 % by cement weight

Compatibility

Sika® AirPRO (SE) 20% can also be combined with Sika's other admixtures, each agent being added separately.

Restrictions

- The effect of this admixture may vary depending on the cement used.
- Pre-tests shall be carried out with the relevant sub-materials for the concrete in accordance with applicable concrete regulations for clarification that the intended effect is achieved.

Equipment

Use plastic, fiberglass or stainless steel tanks when handling Sika® AirPRO (SE) 20%. Clean the equipment with water.

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.

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

Any information or suggestions for use concerning

Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

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Sika® AirPRO (SE) 20%
July 2021, Version 01.01
021403021000000169

SikaAirPROSE20-en-DK-(07-2021)-1-1.pdf