

PRODUCT DATA SHEET

SikaControl®-179 AER

Air Entraining Concrete Admixture

DESCRIPTION

SikaControl®-179 AER is a ready to use highly concentrated, air entraining concrete admixture which creates ultra-stable air bubbles that are strong, small and closely spaced. Its efficiency is based upon the number of correctly sized and evenly distributed air pores imparted to the concrete. SikaControl®-179 AER is suitable for use in tropical and hot climatic conditions.

USES

SikaControl®-179 AER is used to produce easily workable and durable concrete for:

- Low slump concrete
- Concrete containing high carbon content fly ash.
- Runways and taxiways
- Aprons and hard standings
- Dams and reservoirs
- Mass concrete structures
- Concrete containing large amounts of fine materials
- Cold rooms and freezers
- Concrete using high-alkali cements

FEATURES

SikaControl®-179 AER provides the following properties:

- Increased freeze / thaw resistance
- Improved workability and plasticity
- Improved durability
- Greatly improved stability of air entrainment
- Reduced segregation and bleeding
- Increased resistance to scaling
- Increased cohesion
- Reduced water content without loss of workability
- Ready to use - solution is at optimum strength for accurate dispensing

CERTIFICATES AND TEST REPORTS

SikaControl®-179 AER follows the main requirements of:

- ASTM C-260-10
- AASHTO M-154
- CRD-C 13-77
- BS 5075: 1982 Part 2
- DIN 1048 Part 1

PRODUCT INFORMATION

Packaging	Drums, 1,000 L flowbin or in bulk
Appearance and colour	Light brown liquid
Shelf life	12 months from date of manufacture, if stored in a closed container in correct storage conditions.
Storage conditions	Store in undamaged, unopened, original sealed packaging in dry conditions at temperatures between +2 °C and +45 °C. Mix well before use.
Density	~1.0 kg/l (+25 °C)
pH-Value	5.0–10.0
Total chloride ion content	Nil (BS 5075: 1982)

TECHNICAL INFORMATION

Concreting guidance

The standard rules of good concreting practice for production and placing must be observed when using SikaControl®-179 AER in concrete. Refer to relevant standards. Fresh concrete must be cured properly especially at high temperatures in order to prevent plastic and drying shrinkage. Use Sika® Antisol® products as a curing agent or apply wet hessian.

APPLICATION INFORMATION

Recommended dosage

0.1–0.6 % by weight of binder. Exact dosage rates are determined by air meter tests in trial mixes. Factors affecting air content include : type, grading and proportion of sand, cement and aggregates. Cement content per cubic metre. Type and fineness of cement. Water cement ratio and temperature.

Compatibility

SikaControl®-179 AER is compatible with concrete containing other admixtures or admixture systems - water-reducers, high-range water reducers, accelerators, retarders, densifiers and water repellents. Increased air contents generally have a detrimental effect on strengths. This can be adequately catered for by using SikaPlast®, Sika® ViscoCrete®, Sikament® or Plastiment® as water reducer admixture for concrete. It is compatible with sulfate resistant cement. Please consult our Sika Technical Department for any special usage.

Dispensing

As stated in ACI 212 and other publications, when two or more admixtures are used, they must be added to the mix separately (through dispensers or manually) and must not be mixed with each other prior to adding to the concrete mix. For optimum, consistent performance, the air-entraining admixture should be dispensed on damp, fine aggregate. Add SikaControl®-179 AER admixture to the concrete mix using a dispenser designed for air-entraining admixtures; or add manually using a suitable measuring device that ensures accuracy within ±3 % of the required amount.

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

Although freezing does not harm SikaControl®-179 AER, precautions should be taken to protect it from freezing. If it freezes, thaw and reconstitute by mild mechanical agitation. Do not use pressurised air for agitation.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

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 Gulf B.S.C. (c)

Tel: +973 177 38188
Email: info@bh.sika.com
Sika Kuwait Cons. Mat. & Paints Co WLL
Tel: +965 22 282 296
Email: sika.kuwait@kw.sika.com
Web: gcc.sika.com

Sika UAE LLC

Sika MB Construction Chemicals LLC
Sika International Chemicals LLC
Tel: +971 4 439 8200
Email: info@ae.sika.com
Web: gcc.sika.com

Sika Saudi Arabia Limited

Sika Construction Chemicals for
Manufacturing LLC
Riyadh / Jeddah / Dammam / Rabigh
Tel: +966 9200 22167
Email: info@sa.sika.com
Web: gcc.sika.com

Sika LLC - Oman

Sika MB LLC
Tel. +968 22 826 500
Email: info@om.sika.com
Web: gcc.sika.com



ISO 9001, 14001, 45001 – SGS
Sika MB LLC
Sika International Chemicals LLC
Sika Gulf B.S.C. (c)
ISO 9001, 14001 – SGS
Sika Saudi Arabia Limited
ISO 9001, 14001 – TÜV
Sika MB Construction Chemicals LLC
Sika Construction Chemicals
for Manufacturing LLC
ISO 9001 – LMS
Sika MB LLC

All products are supplied under
a management system certified
to conform to the requirements
of the quality, environmental
and occupational health &
safety standards ISO 9001, ISO
14001 and ISO 45001.



Product Data Sheet

SikaControl®-179 AER

April 2025, Version 02.01

02140300000002038