

# PRODUCT DATA SHEET

# Sika® AIR

#### AIR ENTRAINING ADMIXTURE

#### PRODUCT DESCRIPTION

Sika® AIR admixture is an aqueous solution of organic materials. Sika® AIR meets the requirements of ASTM C-260 for air entraining admixtures.

#### **USES**

Sika® AIR is recommended for use whenever air entrained concrete is desired. Ready-mix, precast and block producers can achieve predictable and uniform entrained air contents in concrete, even where harsh lean mixes are used or flyash is added to the concrete.

## **CHARACTERISTICS / ADVANTAGES**

#### **Durability:**

- Air entrainment is recognized as the most effective prevention against concrete scaling in exposed environments. Air entrained concrete delivers particular benefits in the form of increased concrete durability. This is important in colder climates where frost and freezethaw cycles can cause scaling and damage to the concrete surface.
- Air entraining agents help to prevent scaling by creating microscopic air voids that water trapped in the concrete can expand into when the concrete freezes, thus preventing cracks caused by the natural expansion. Entrained air voids in the concrete will also increase durability in harsh environments where concrete is exposed to deicing salts, marine salts and sulfates.
- Workability and placeability are also improved by the lubricating action of the microscopic bubbles in the concrete. Concrete will flow better, and bleeding and shrinkage will be reduced because less water is needed to obtain the desired workability.

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#### PRODUCT INFORMATION

Packaging	Sika® AIR is available in 55 gallon drums (208 liters), 275 gallon totes (1040 liters) and bulk delivery.
Appearance / Color	Dark Amber Liquid.
Shelf Life	Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C - 27°C) is 1 year.
Storage Conditions	Sika® AIR should be stored at above 40°F (5°C). If frozen, thaw and agitate thoroughly to return to normal state.
Specific Gravity	Approx. 1.01
Recommended Dosage	Dosage rates for Sika® AIR will typically fall between 0.25 and 3 fl. oz per 100 lbs. (16 - 195 ml / 100 kg) of cementitious to entrain between 4 and 6 percent air. Higher air contents may be obtained by increasing the dosage rate. Dosage rates will vary depending on the air content required for a particular project. Typically air contents will be specified in the range of 4 to 8 percent by volume.  Other factors that may affect the amount of air entrained into the concrete including total cementitious content, type of pozzolanic materials, sand gradation, salt/clay in aggregates, temperature and water content. The use of fly ash, particularly high LOI fly ash, can result in a higher dosage of air entrainment.  Sika recommends that trial mixes be performed whenever material or any other changes are made that may affect the amount of entrained air. In mixes requiring a lower or higher amount dosage rate, please contact your local Sika representative or Sika's technical service department at 1-800-933-7452 for further information.
Mixing	Measure the required quantity per batch manually or with automatic dispenser equipment. Add Sika® AIR to mixing water or sand. Do not mix with dry cement. When Sika® AIR is used in combination with other admixtures, care must be taken to dispense each admixture separately into the mix. Combination with Other Admixtures:  Combination with other admixtures, particularly water reducers and retarders, may increase the amount of entrained air in the mix. Air contents should be checked with an air-meter after batching and dosage adjustments made at the concrete plant.

#### **LIMITATIONS**

Exact dosage rates of Sika® AIR can be determined by air meter test in trial mixes.

High air content will most likely have a detrimental effect on strengths.

For additional information, please contact your local Sika Representative.

#### **BASIS OF PRODUCT DATA**

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

#### OTHER RESTRICTIONS

See Legal Disclaimer.

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### **ENVIRONMENTAL, HEALTH AND 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 DISCLAIMER**

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data



Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL AP-PLY INCLUDING ANY WARRANTY OF MERCHANTABIL-ITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTH-ERS.

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling 201-933-8300.

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