Product Data Sheet Edition 06.12.2012 Identification no. 433613 Sika AER-C

Sika[®] AER-C Air-Entraining Admixture

Description	Sika AER-C admixture is an air-enhancing admixture for concrete based on neutralized vinsol resin. Sika AER-C meets the requirements of ASTM C-260.
Applications	Sika AER-C is designed for usage in exterior concrete such as highway paving, curb and gutters, sidewalks, driveways, slabs, walls or other areas needing protection from freeze-thaw damage or the harmful effect of deicing salts. Sika AER-C is recom- mended for applications with a short mix cycle and time to placement, or where the usage of a neutralized vinsol resin admixture is expressly stipulated. Sika AER-C can also be successfully used where harsh mixes are used or fly-ash is added to the mix. Sika AER-C is an effective and economical tool to improve the paste quality of lean concrete mixes and reduce risk of concrete segregation and bleeding.
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 freeze-thaw 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: Workability and placeability are also improved by the lubricating action of the microscopic bubbles in the concrete. The concrete flows better, bleeding and shrinkage is reduced because lower water content is needed for desired workability.
How to Use	
Dosage	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 include, but are not limited to total cementitious content, type of pozzolanic materials, sand gradation, ambient & concrete temperature and water content. Sika recommends that trial mixes be tested whenever material or any other changes are made that may affect the amount of entrained air. Dosage rates for Sika AER-C will typically fall between 0.5 and 1.5 fl. oz./100 lbs. (32 - 97 ml/100 kg) of cementitious to entrain between 4 and 6 percent air. Higher air contents may be obtained by increasing the dosage rate. Combination with other admixtures, particularly water reducers and retarders, may effect the air content in the mix. Air contents should be checked with an air-meter after batching and dosage adjustments made at the concrete plant.
Mixing	Measure the required quantity per batch manually or with automatic dispenser equip- ment. Add Sika AER-C to mixing water or sand. Do not mix with dry cement. When used in combination with other admixtures, care must be taken to dispense each admixture separately into the mix.

Packaging	Sika AER-C is available in 55 gallon drum (208 liter), 275 gallon totes (1040 liters) drums and bulk delivery.
Storage and Shelf Life	Sika AER-C should be stored at above 40°F (5°C). If frozen, thaw and agitate thor- oughly to return to normal state.
	Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10°C - 27°C) is one year minimum.
Typical Data	
Appearance	Dark Brown liquid.
Specific Gravity	Approx. 1.06
Caution	WARNING: IRRITANT. Contains sodium hydroxide (CAS:1310-73-2). Causes skin/ eye/respiratory tract irritation. Harmful if swallowed.
Handling and Storage	Avoid direct contact. Wear personal protective equipment (chemical resistant goggles/ gloves/clothing) to prevent direct contact with skin and eyes. Use only in well ventilat- ed areas. Open doors and windows during use. Use a properly fitted NIOSH respi- rator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and launder before reuse.
First Aid	Eyes – Hold eyelids apart and flush thoroughly with water for 15 minutes. Skin – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. Inhalation – Remove to fresh air. Ingestion – Do not induce vomiting. Dilute with water. Contact physician. In all cases contact a physician immediately if symptoms persist.
Clean Up	Use personal protective equipment (chemical resistant gloves/goggles/clothing). Without direct contact, sweep up spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable lo- cal, state, and federal regulations.

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Sika Corporation 201 Polito Avenue Lyndhurst, NJ 07071 Phone: (201) 933-8800 Fax: (201) 933-6225 www.sikausa.com Sika Canada Inc. 601, Delmar Avenue Pointe-Claire, QC H9R 4A9 Phone: (514) 697-2610 Fax: (514) 697-3087 www.sika.ca

1-800-933-SIKA

Regional Information and Sales Centers. For the location of your nearest Sika representative, contact your regional center.

U.S.: North East Region: Fairless Hills, PA, Phone: (215) 295 -6600 North Central Region: South East Region: Conyers, GA, Phone: (770) 760-1300 South Central Region: Western Region: Santa Fe Springs, CA, Phone: (562) 903-3650

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