

AIR-ENTRAINING ADMIXTURES FOR USE IN PORTLAND CEMENT CONCRETE

<u>BRAND</u>	<u>DOSAGE RATE</u>	<u>MANUFACTURER</u>
Ad-Aire	1 oz. per Sack (29.6 mL / 42.6 kg)	Carter-Waters Corp. Box 412676 Kansas City, MO 64141 (816) 471-2570
Addiment AEC Addiment LP-1	0.5-0.8 oz./100# Cement (14.8 - 23.7 mL / 45.4 kg)	Addiment, Inc. P. O. Box 47520 Atlanta, GA 30362
Aermix	3/4-1 oz. per Sack (22.2 - 29.6 mL / 42.6 kg)	Old North Mfg. Co., Inc P. O. Box 598 Lenoir, N.C. 28645 (704) 754-6413
AEA-15 Sika Air	1/4 - 1 oz. per 100# Cement (7.2 - 29.6 mL / 45.4 kg) 0.5 – 3 oz./100# Cement (14.8 – 88.8 mL / 45.4 kg)	Sika Corporation New Construction 315 N. Ebrite Street Mesquite, Texas 75149 (972) 289-6480
Air-In Air-In-XT	1/2 -3/4 oz. per 100# Cement (14.8 – 88.8 mL / 45.4 kg)	Hunt Process Corp. Southern P. O. Box 688 Ridgeland, MS 39158 (601) 856-8811
Air Plus Super Air Plus	0.25 – 1.25 oz. per 100# Cement (0.15 – 0.8 g /kg) 0.12 – 0.65 oz. per 100# Cement (0.08 – 0.40 g /kg)	Fritz-Pak Corporation 4821 Eastover Circle Mesquite, TX 75149
Eucon Air 30 Eucon Air 40	2.1 oz. per 100# Cement (62.1 mL / 45.4 kg) 1- 4 oz. per 100# Cement (29.6 - 118.3 mL / 45.4 kg)	The Euclid Chemical Co. 19218 Redwood Rd. Cleveland, OH 44110 (216) 531-9222
Daravair 1400 Darex AEA	1/2 - 3 oz. per 100# Cement (14.8 - 88.7 mL / 45.4 kg) 3/4 - 3 oz. per 100# Cement (22.2 - 88.7 mL / 45.4 kg)	W. R. Grace & Co. P. O. Box 2585 Houston, TX 77252 (713) 223-8353
Airalon 3000 Terapave AEA	0.5 - 3 oz. per 100# Cement (14.8 - 88.7 mL / 45.4 kg) 0.5 - 3 oz. per 100# Cement (14.8 - 88.7 mL / 45.4 kg)	

<u>BRAND</u>	<u>DOSAGE RATE</u>	<u>MANUFACTURER</u>
Darex II AEA	1/2 - 5 oz. per 100# Cement (14.8 - 148 mL / 45.4 kg)	W. R. Grace & Co. P. O. Box 2585 Houston, TX 77252 (713) 223-8353
Daravair 1000	3/4 - 3 oz. per100# Cement (22.2 - 88.7 mL / 45.4 kg)	
Euco Air Mix AEA 92 Air Mix 200 Air Mix 250	1/2-1 oz. per Sack (14.8 - 29.6 mL / 42.6 kg) 1/2-2 oz. per 100# Cement (14.8 - 59.2 mL / 45.4 kg)	The Euclid Chemical Co. 19218 Redwood Rd. Cleveland, OH 44110 (800) 321-7628
MB-AE 90 MBVR Micro-Air Pave Air Pave Air 90 Everair Plus	1/4 - 4 oz. per 100# Cement (7.4 - 118.3 mL / 45.4 kg) 0.25 -4.0 oz. 100# Cement (16 - 260mL / 100 kg)	BASF Admixtures, Inc (formerly DeGussa & Master Builders) 23700 Chagrin Blvd. Cleveland, OH 44122 (216) 831-7500
Polychem AE	1/4 - 4 oz. per 100# Cement (7.4 - 118.3 mL / 45.4 kg)	General Resource Technology 2978 Center Court Eagan, MN. 55121-1257 (651) 454-4151
Prestonaire 20	1/4-1 oz. per Sack (22.25 - 29.6 mL / 42.6 kg)	Texmastic International, Inc. P.O. Box 210309 Dallas, Texas 75211-210309 214-330-4605
Pro Air 260	0.12 - 88.7 mL / 45.4 kg (0.2 -3.0 oz. 100# Cement)	Pro Mix Technologies P. O. Box 6 Allen, TX 75013
RSA-10	0.5 -2.0 oz. 100# Cement (33 - 130mL / 100 kg)	RussTech, Inc. 11208 Decimal Dr. Louisville, KY 40299 502-267-7700 (972) 772-6010
Vinsol NVX	1 oz. per Sack (29.6 mL / 42.6 kg)	Hercules, Inc. 910 Marketing Center Wilmington, DE 19894 (800) 441-7615

METHOD OF DOCUMENTATION OF ACCEPTANCE: By brand and manufacturer.

REQUIREMENTS FOR CONCRETE AIR-ENTRAINING AGENTS

The following procedure is to be used in acquiring approval of air-entraining agents:

1. The manufacturer/supplier shall provide the Materials Division with a test report from a recognized laboratory indicating compliance with AASHTO M 154, Standard Specification for Air-Entraining Admixtures for Concrete. A recognized laboratory is any State Highway Agency, Federal Highway Administration or independent laboratory regularly inspected by the National Institute of Standards and Technology. All test reports shall include the manufacturer's name, brand name of the material, and date of testing.
2. In addition to the requirements of the AASHTO Specification, the manufacturer/supplier shall include:
 - a. The constituents of the admixture. If the admixture is manufactured by neutralizing Vinsol resin with caustic soda (sodium hydroxide), the ratio of sodium hydroxide to Vinsol resin shall be given.
 - b. The chloride content of the admixture and whether or not chloride was added during its manufacture.
 - c. Uniformity tests according to AASHTO M 154 to establish compositional or chemical equivalence. Where the nature of the admixture or the Department's testing capabilities may make some or all of the procedures unsuitable, other requirements may be established by agreement between the Department and the manufacturer.
 - d. Recommended dosage rate.
3. A sample of the air-entraining agent will be supplied to the Materials Division at the following address. Product information and Material Safety Data Sheets must be included.

Box 2261	or	11301 Baseline Road
Little Rock, AR 72203		Little Rock, AR 72209
4. If the product meets material requirements, the product will be approved for inclusion after receipt of a signed QPL certification.
5. Destination samples will be taken as deemed necessary to assure compliance with specifications. Material failures either in the laboratory or in field applications may be considered sufficient cause to reject the material. The Materials Engineer will determine if the failures warrant discontinuing acceptance and removal from this QPL.