

Air-Entraining Admixtures For Use In Portland Cement Concrete

Supplier	Brand	Dosage Rate
Euclid Chemical Company, The Cleveland OH	Eucon AEA 92S	1/2 - 2 oz. per 100# cement
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GCP Applied Technologies Inc. Cambridge MA	Airalon 3000	1/2 - 3 oz. per 100# cement
	Daravair 1000	3/4 - 3 oz. per 100# cement
	Daravair 1400	1/2 - 3 oz. per 100# cement
	Daravair AT30	1/4 - 3 oz. per 100# cement
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Master Builders Solutions Admixtures US, LLC. Cleveland OH	MasterAir AE 400	0.25 - 4 oz. per 100# cement
	MasterAir AE 90	0.25 - 4 oz. per 100# cement
	MasterAir VR 10	0.25 - 4 oz. per 100# cement
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Sika Corporation Lyndhurst NJ	Sika Air	1/2 - 3 oz. per 100# cement.
	SikaControl AIR-160	0.1- 6.0 oz. per 100# cement

Method of Documentation of Acceptance:

By brand and source.

Method of Approval:

**THE PROCEDURE BELOW MUST BE FOLLOWED IN ACQUIRING
APPROVAL OF AIR-ENTRAINING AGENTS:**

- 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 AASHTO re:source, Cement and Concrete Reference Laboratory (CCRL) or other Department approved accreditation/inspection agency. All test reports shall include the manufacturer’s name, brand name of the material, and date of testing.

- In addition to the requirements of the AASHTO Specification, the manufacturer/supplier shall include:

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- **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.**
 - **The chloride content of the admixture and whether or not chloride was added during its manufacture.**
 - **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.**
 - **Recommended dosage rate.**
- **A sample of the air-entraining agent will be supplied to the Materials Division. Product information and Safety Data Sheets (SDS) must be included.**
 - **If the product meets material requirements, the product will be approved for inclusion after receipt of a signed QPL certification.**
 - **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.**

No information contained in these lists is to be used for promotional purposes.

The manufacturer of privately labeled products must be disclosed.