

## AE-12

### AIR ENTRAINING ADMIXTURE FOR CONCRETE

**PRODUCT DESCRIPTION:** *Specco AE-12* is a liquid vinsol resin air-entraining admixture, designed to produce microscopic air bubbles in concrete mixes. **AE-12** helps to increase the workability of the concrete and provides freeze thaw resistance, improves plasticity, cohesiveness and placement, while reducing segregation, bleeding and shrinkage of the concrete mix. **AE-12** can be used across a wide range of concrete mix designs.

**BENEFITS:**

- Adds freeze/thaw protection against spalling
- Improves workability and placement
- Provides weight reduction and higher concrete volume for precast

**COMPOSITION:** Neutralized vinsol resin with an added accelerator. Contains less than 0.005 % chlorides. **AE-12** does not contain any calcium chloride or intentionally added chlorides that would initiate or promote corrosion of reinforcement steel, or contribute to efflorescence.

**LEED CREDIT CONSIDERATIONS: MR Credits 5.2:** Regional materials-Greater than 20% extracted, processed and manufactured regionally at production location: Kankakee, IL 60901. 90%. Content- Harvested within 500 miles.

PHYSICAL PROPERTIES at 70° F (21°C)	APPROXIMATE VALUES
Weight per gallon:	8.55 +/- 0.5
pH:	10.0 +/- 0.2
Color:	Clear, dark brown liquid
Viscosity-Brookfield:	10 cps

**TECHNICAL DATA:** *Specco AE-12* complies with ASTM C-233, ASTM C-260, AASHTO M-154, Federal SS-C-192 and CRD-C-13-66.

**DIRECTIONS FOR USE & RECOMMENDED ADDITION RATES:** There is no set dosage rate for **AE-12** however, it is typically dosed at 0.75 to 1.0 oz. per 100 lbs. of cement (49-65 ml/100 kg) for most applications to produce concrete with 5 to 6 percent air entrainment. The exact quantity of **AE-12** required will vary due to differences in the concrete materials or pour field conditions. These include but are not limited to: ambient and mix temperatures, cement, sand and aggregate gradation and ratio, additional admixtures in the mix, slump, water content, and temperature, mix time and mixer type, means of conveying and placing, as well as vibration method and duration. *Specco* recommends a trial mix be conducted with actual production materials in order to determine the optimum dosage for specific set time or strength requirements. Once this dosage is established, frequent checks should be made during the placement of the concrete to ensure desired air entrainment levels are maintained. The pre-measured amount of **AE-12** selected should be added to the batch water if possible to allow maximum dispersion throughout the mix.

**CAUTIONS:** Since air entrainment admixtures will increase the volume of the concrete, it is necessary to reduce the water requirement and aggregate content, to maintain the cement factor and yield. **AE-12** is fully effective and compatible in concrete with other admixtures, including calcium chloride. However, each admixture should be added separately to the concrete mix, and once added, may alter the amount of air entrainment obtained. The addition rate of **AE-12** is usually increased when used in tandem with certain high range or carboxylated type superplasticizers. The addition rate of **AE-12** is usually decreased when used in tandem with certain low range water reducers or retarding compounds.

**CAUTIONS (Continued):** Avoid excessive vibration when using **AE-12** which can decrease the resulting concrete air content and may generate increased surface defects or aggregate segregation, especially in precast related work. **AE-12** will freeze at approximately 32° F (0° C), but may be completely restored by thawing above 32° F (0° C) and thoroughly mechanically agitating before use. Do not use pressurized air for mixing or agitation. **AE-12** should be stirred before using if the material has set for an extended period (3-6 months).

**GHS HAZARD RATINGS: NONE**

**FIRST AID: Refer to product S.D.S. (Safety Data Sheet) for complete health and safety information before using this product. FOR MEDICAL EMERGENCIES ONLY –CALL INFOTRAC AT 800-535-5053.:** Avoid contact with skin and eyes. Wear protective clothing and safety glasses during application. Keep away from food and drink. Do not take internally. Refer to product S.D.S. (Safety Data Sheet) for further health and safety information. **FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.** For medical emergencies only, call Infotrac 800-535-5053.

**H.M.I.S. CODES:** HEALTH = 1, FLAMMABILITY= 0, REACTIVITY = 0, PERSONAL PROTECTION = C (GLOVES, GOGGLES, APRON)

**SHIPPING NAME:** Concrete Admixture – Water base - Not regulated

**SHIPPING CLASS:** ITEM 33880, SUB 2, LTL 55

**STORAGE:** Ideal storage is between 60° to 80° F. Keep from freezing.

**SHELF LIFE:** 1 year stored properly. Depending on storage conditions, the shelf life may be extended.

**PACKAGING:** 5 gallon (18.9 L) pails, 55 gallon (208 L) drums, 265 gallon (1000 L) containers.

**WARRANTY:** Specco Industries Inc (Specco) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Specco, no other representations or statements made by Specco or its representatives, in writing or orally, shall alter this warranty. **SPECCO MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME.** If any Specco product fails to conform with this warranty, Specco will replace the product at no cost to Buyer. **Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages.** Specco does not authorize anyone on its behalf to make any written or oral statements which in any way alter Specco's installation information or instructions in its product literature or on its packaging labels. **Specco explicitly excludes any written or oral statements or implied warranty on the performance of an applied/installed product manufactured or sold by or through Specco. Specco has no control over Specco application standards adherence, site conditions, atmospheric variations, installer/applicator skill level or the determination of the suitability of any Specco products for a specific intended purpose. Buyer shall be solely responsible for determining the suitability of Specco's products for the Buyer's intended purposes.** Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. **Revised 07-17-15**