Product Data Sheet
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Sika AEA-14

Construction

Sika® AEA-14

Air Entraining Admixture

Description

Sika AEA-14 admixture is an aqueous solution of organic materials.

Sika AEA-14 meets the requirements of ASTM C-260 for air entraining admixtures.

Applications

Sika AEA-14 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 fly-ash is added to the concrete.

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. Concrete flows better, and bleeding and shrinkage is reduced because less water is needed to obtain the desired workability. Sika AEA-14 provides stable and predictable air contents in concrete, with uniform air bubble spacing throughout the concrete matrix.

How to Use

Dosage

Dosage rates for Sika AEA-14 will typically fall between 1 and 3 fl. oz. per 100 lbs. (65 - 195 ml/100 kg) of cement 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 include, but are not limited to: total cementitious content, type of pozzolanic materials, sand gradation, temperature and water content. Sika recommends that trial mixes be performed whenever material or any other changes are made that may affect the amount of entrained air.

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Mixing	Measure the required quantity per batch manually or with automatic dispenser equipment. Add Sika AEA-14 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. **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.
Storage and Shelf life	Sika AEA-14 should be stored at above 40°F (5°C). If frozen, thaw and agitate thoroughly to return to its normal state before use. Shelf life when stored in dry warehouse conditions between 50°F and 80°F (10° - 27°C) is one year.
Packaging	Sika AEA-14 is available in 55 gallon drum (208 liter), 275 gallon totes (1040 liters) drums and bulk delivery.

Typical Data

Appearance	Dark Brown liquid.
Specific Gravity	Approx. 1.0
CAUTION: IRRITANT	Contains Aqueous Solution (CAS:Mixture). May cause eye/skin/respiratory irritaton. May be 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 ventilated areas. 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 person 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 goggles/gloves/clothing). Without direct contact, remove spilled or excess product and place in suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

KEEP CONTAINER TIGHTLY CLOSED — KEEP OUT OF REACH OF CHILDREN
NOT FOR INTERNAL CONSUMPTION — FOR INDUSTRIAL USE ONLY
CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION

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QUALITY ISO 9001 9002 ACHIEVEMENT

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Quality Certification Numbers: Lyndhurst: FM 69711 (ISO 9000), FM 70421 (QS 9000), Marion: FM 69715, Kansas City: FM 69107, Santa Fe Springs: FM 69408