

## 1. Product Description

**StenMix® AER** is an air-entraining admixture for controlled dispersion of micro air bubbles in concrete which increases resistance to freeze and thaw cycles. **StenMix® AER** conforms to the requirements of EN 934-2 Table 5 (Air-Entraining Admixture for Concrete) and ASTM C 260 (Standard Specification for Air-Entraining Admixtures for Concrete).

## 2. Uses

**StenMix® AER** is used in concrete highways, airports, runways and aprons, dams and water reservoirs, and watertight mass concrete. It can also be used in the production of all types of reinforced/unreinforced, lightweight/normal-weight concrete and in mass concrete production. **StenMix® AER** can be used for producing concrete with high workability and high durability, in concrete masses exposed to winter conditions and deicing salts, in places where freeze/thaw cycles are frequent, and in places where air-entrained concrete is required.

## 3. Application

**StenMix® AER** is a ready-to-use admixture. It can be mixed with concrete directly. Depending on the desired amount of entrained air, it should be used at 0.03% to 0.15% based on the weight of cement.

The exact amount must be determined by air meter tests in trial mixes, considering aggregate size distribution, water/cement ratio, type, particle size and dosage of cement and ambient temperature. Increased air content may have an adverse effect on concrete strength. (Final strength is expected to decrease by approximately 5% for each additional 1% air.) This adverse effect on concrete strength can be compensated by using StenMix® series water-reducing and strength-enhancing admixtures together with air-entraining agents.

## 4. Safety

Applicators and supervisors must read the Material Safety Data Sheet (SDS) carefully and follow the instructions provided. Emptied packages must be handled in compliance with relevant regulations and laws. The application must be carried out by skilled workers under supervision of experts and the applicators must use all kinds of protective equipment required for the worksite and the task such as goggles, mask and gloves.

## 5. Storage

The material must be kept in dry indoor storage. Protect the product from freezing. Shelf life is 1 year without opening the package.

Products must be stored at +5 °C to +35 °C in closed conditions protected from direct sunlight. Low temperatures may cause crystallization of the product; in this case, the product can be used after heating and homogenizing at +20 °C. The product must be stirred thoroughly before use after prolonged storage.

## Air Entraining Concrete Admixture

### Highlights

- Ensures controlled distribution of air in concrete as micro pores
- Increases concrete's resistance to freeze/thaw cycles
- Reduces the risk of segregation in concrete
- Allows production of concrete with high workability and high durability
- Used in structures exposed to winter conditions and in watertight mass concrete
- Used where air-entrained concrete is required
- Can be used in production of all types of reinforced/unreinforced, lightweight/normal weight concrete and concrete blocks
- Ideal for concrete highways, airports, runways, aprons, dams and water reservoirs



## 6. Disclaimer

This document is provided for general information and reflects **Stenkim®**'s laboratory data and field experience at the time of publication. **Stenkim®** reserves the right to revise this information at any time without notice.

**Stenkim®** warrants that its products conform to the stated specifications on delivery. The buyer is responsible for determining the product's suitability for the intended application and for all conditions of transport, storage, handling, and use. **Stenkim®** accepts no liability for results obtained under conditions outside its control. **Stenkim®**'s liability under this warranty is limited to replacement of non-conforming product and excludes any consequential or indirect damages.

## 7. Technical Data

| Property             | Method        | Result                                          |
|----------------------|---------------|-------------------------------------------------|
| Appearance - Color   |               | Light-colored liquid                            |
| Chemical Composition |               | Synthetic surface-active agents                 |
| Density              | EN ISO 2811-2 | 1.01 g/cm <sup>3</sup> ± 0.01 g/cm <sup>3</sup> |
| pH                   |               | 7 ± 1                                           |
| Chloride             | EN 480-10     | None                                            |
| Freezing Point       | ISO 3016      | 0 °C                                            |
| Shelf Life           |               | 1 year                                          |
| Packaging            |               | 200 kg drums or 1,000 kg IBCs                   |

**Stenkim®** reserves the right to make changes to the values in this table at any time. *CE: CE marked in accordance with EN 934-2:2009+A1:2012 (DoP STN-AER-0002).*

