

## 1. Product Description

**StenMix® SUPA 140HS** is a polycarboxylate based, high-range water-reducing superplasticizing concrete admixture for high-performance concrete. **StenMix® SUPA 140HS** conforms to the requirements of EN 934-2 Tables 3.1 and 3.2 (High-Range Water Reducer/Superplasticizer Concrete Admixture) and ASTM C 494 Type F (High-Range Water Reducer/Superplasticizer Concrete Admixture Standard).

## 2. Uses

**StenMix® SUPA 140HS** creates a void-free concrete mass with a smooth finish in densely reinforced foundations, walls and columns that require flowable concrete. It can be used in high-strength precast and prestressed concrete applications, as well as in concrete work requiring early formwork removal. **StenMix® SUPA 140HS**, when added to ready-mix concrete, provides excellent workability.

It eliminates the risk of segregation during concrete transportation and placement. It reduces the amount of vibration required. It allows the concrete to set in normal time without a retarding effect. When used at the appropriate dosage, **StenMix® SUPA 140HS** reduces the water requirement of concrete by 10-25%.

## 3. Application

The recommended dosage is 0.6% to 2.0% based on weight of cement. **StenMix® SUPA 140HS** must not be added directly to dry cement, but must be added to the mixture along with the mixing water during concrete preparation. **StenMix® SUPA 140HS** must preferably be added to the mixing water at the concrete plant. The dosage to be used should be determined by laboratory tests related to the required workability and strength.

## 4. Safety

Applicators and supervisors must read the Safety Data Sheet (SDS) carefully and follow the instructions provided. Emptied packages must be disposed of in compliance with relevant regulations and laws. The application must be carried out by skilled workers under the supervision of experts and the applicators must use all personal 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. Products must be stored at +5 °C to +35 °C in enclosed storage protected from direct sunlight.

Shelf life is 1 year in unopened packaging. Low temperatures may cause crystallization of the product; in this case, the product can be used after being warmed to +20 °C and homogenized. After prolonged storage, the product must be stirred thoroughly before use.

## 6. Disclaimer

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

### High Performance Superplasticizer

#### Highlights

- High-range water reduction
- Used to create a void-free concrete mass with a smooth surface finish
- Can be used in high-early-strength precast and prestressed concrete
- Eliminates the risk of segregation
- Reduces the amount of vibration required
- Increases the impermeability of concrete



**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 purpose and for all conditions of transport, storage, application, 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         |               | Liquid - Brown                |
| Chemical Composition       |               | Polycarboxylate Ether         |
| Density @20 °C             | EN ISO 2811-2 | 1.07 ± 0.02 g/cm <sup>3</sup> |
| pH                         | ISO 4316      | 5 ± 1                         |
| Solids Content (by weight) | EN ISO 3251   | 26% ± 1.5%                    |
| Chloride Content           | EN 480-10     | ≤ 0.1%                        |
| Freezing Point             | ISO 3016      | -5 °C                         |
| Shelf Life                 |               | 1 year                        |
| Packaging                  |               | 220 kg drums or 1,200 kg IBCs |

**Stenkim®** reserves the right to make changes to the values in this table at any time.

