

1. Product Description

StenMix® SUPA 280 is a polycarboxylate ether (PCE)-based, high-range water-reducing superplasticizer for high-performance concrete. **StenMix® SUPA 280** conforms to the requirements of EN 934-2 Table 11.1 and Table 11.2 (Set Retarding / High-Range Water Reducing/Superplasticizing Concrete Admixture) and ASTM C 494/C 494M Type G (Water Reducing, High Range - Retarding).

2. Uses

StenMix® SUPA 280 is used in the production of flowable concrete to improve surface quality and density. It is used particularly in densely reinforced slabs, foundations, walls, beams and columns where extended and controlled setting times are required at high ambient temperatures. **StenMix® SUPA 280**, 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 extends the setting time of the concrete without affecting final strength.

It increases the impermeability of concrete by reducing the amount of mixing water and consequently reducing the amount of voids in hardened concrete. **StenMix® SUPA 280** does not contain chlorides or any other components that may cause corrosion of reinforcement. When used at the appropriate dosage, **StenMix® SUPA 280** reduces the water requirement of concrete by 15-30%.

3. Application

The recommended dosage is 0.5% to 2.0% based on weight of cement. **StenMix® SUPA 280** 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 280** 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.

High Performance Superplasticizer

Highlights

- High-range water reduction
- Improves surface finish and density
- Extends the setting time of the concrete without affecting final strength
- Enables pouring of high-quality concrete at high ambient temperatures
- Improves workability
- Eliminates the risk of segregation
- Reduces the amount of vibration required
- Increases the impermeability of concrete



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.

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-Based Organic Polymer
Density @20 °C	EN ISO 2811-2	1.05 ± 0.01 g/cm ³
pH	ISO 4316	4.7 ± 1
Solids Content (by weight)	EN ISO 3251	18% ± 1%
Chloride Content	EN 480-10	≤ 0.1%
Freezing Point	ISO 3016	-5 °C
Viscosity	EN ISO 3219	35 ± 10 cP
Shelf Life		1 year
Packaging		200 kg drums or 1,100 kg IBCs

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

