



CONSOL SS-77

High Range Water Reducer (Superplasticizer)

DESCRIPTION

CONSOL SS-77 is an innovative polycarboxylic ether (PCE) based superplasticizer ideally suited for concrete and mortar. It is particularly developed for the production of high flow concrete with exceptional flow retention properties.

CONSOL SS-77 complies with ASTM C494/C494M-19 for type F admixtures.

RECOMMENDED FOR

CONSOL SS-77 is especially suitable for concrete mixes with prolonged transportation time and long workability, powerful water reduction and excellent flowability.

CONSOL SS-77 is suitable for the production of both precast concrete and ready mix concrete. **CONSOL SS-77** facilitates extreme water reduction, excellent flowability with the same time optimal cohesion and highest self-compacting behavior.

CONSOL SS-77 is mainly used for the following applications:

- Concrete with a very high-water reduction (up to 30%)
- High performance concrete
- Concrete in summer and with a prolonged transportation and workability time
- Watertight concrete
- Precast concrete
- Ready mix concrete
- Self-compacting concrete
- High strength concrete
- Mass concrete

BENEFITS

CONSOL SS-77 as a powerful superplasticizer acts by different mechanisms. Through surface adsorption and steric effects separating the binder particles the following properties are achieved:

- Extremely powerful water-reduction, resulting in high density, high strength and reduced permeability.
- Excellent plasticising effect, resulting in improved flowability, placing and compacting behavior. Therefore suitable for the production of self-compacting concrete.
- Improved shrinkage and creep behaviour
- Reduce rate of carbonation of the concrete
- Improved watertight behaviour

PRODUCT DATA

Form

Liquid

Appearance

Turbid Brownish Liquid

Packaging

200 litres sealed drum.

1000 litres IBC's or tanker delivery on request.

Storage

Dry, shaded place. Protect from direct sunlight and frost.

Shelf Life

CONSOL SS-77 can be stored for 12 months if stored as recommend in unopened original containers.

TECHNICAL DATA

Chemical Base

Modified polycarboxylate ether in water

Density

Specific density: 1.07 ± 0.02 kg/L (at 25°C)

INSTRUCTION FOR USE

Dosage

- For soft plastic concrete 0.2 - 0.8 %
- For flowing and self-compacting concrete 0.6 – 1.5 % by weight of cement.

To produce flowing and/or self-compacting concrete, special concrete mix design is required. Pre-trials are mandatory. Please consult our Technical Service Department.

Dispensing

CONSOL SS-77 is added to the gauging water or added with it into the concrete mixer.

To take advantage of high water reduction, a wet mixing time of at least 60 seconds is recommended. To avoid excess water in the concrete, final dosage must start after 2/3 of wet mixing time only.



Applications

CONSOL SS-77 is a liquid admixture to be added to the concrete during the mixing process. The best results are obtained when the admixture is added after all the other components are already in the mixer and after the addition of at least 80% of the total water.

PRECAUTIONS

Health: **CONSOL SS-77** does not contain any hazardous substances requiring labeling. It is safe for use with standard precautions followed in the construction industry, such as use of hand gloves, safety goggles, etc. For detail health, safety and environmental recommendations, please consult and follow all instruction on the Material Safety Data Sheet.

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