



#### **TECHNICAL DATA SHEET**

Version: 001 Update: June, 2021

# **CONSOL SS-811**

High Range Water Reducer (Superplasticizer)

# **DESCRIPTION**

**CONSOL SS-811** is a superplasticizer for concrete and mortar. It is particulary developed for the production of high flow concrete with exceptional flow retention with high early strength properties.

**CONSOL SS-811** complies with ASTM C494/C494M-19 for type F admixtures.

#### **RECOMENDED FOR**

**CONSOL SS-811** is especially suitable for concrete mixes with prolonged transportation time and long workability, powerful water reduction and excellent flowability.

**CONSOL SS-811** is suitable for the production of both precast concrete and ready mix concrete. **CONSOL SS-811** facilitates extreme water reduction, excellent flowablity with the same time optimal cohesion and highest self-compacting behavior.

**CONSOL SS-811** is mainly used for the following applications:

- Concrete with a very high water reduction (up to 40%)
- 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-811** as a powerful superplasticizer acts by different mechanisms. Through surface adsorption and sterical 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 selfcompacting concrete.
- Improved shrinkage and creep behavior.
- Reduce rate of carbonation of the concrete.
- Improved watertight behavior.

#### **PRODUCT DATA**

**Form** 

Liquid

**Appearance** 

Brown

**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-811** can be stored for 12 months if stored as recommend in unopened original containers

## **TECHNICAL DATA**

**Chemical Base** 

Modified polycarboxylate in water

Density

Specific density:  $1.06 \pm 0.02 \text{ kg/L}$  (at 25 °C)

#### **INSTRUCTION FOR USE**

Dosage

For flowing and self-compacting concrete 0.8 – 2.0 % by weight of cement.







## Dispensing

**CONSOL SS-811** 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.

## **Application**

**CONSOL SS-811** 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-811** 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.

