



CONSOL P 291 AS

High Performance Superplasticizer

DESCRIPTION

CONSOL P 291 AS is an superplasticizer for concrete and mortar. It is particularly developed for the production of high flow concrete with exceptional flow retention properties.

CONSOL P 291 AS complies with ASTM C494-92 for type F admixtures.

RECOMENDED FOR

CONSOL P 291 AS is especially suitable for concrete mixes with prolonged transportation time and long workability, powerful water reduction and excellent flow ability.

CONSOL P 291 AS is suitable for the production of both precast concrete and ready mix concrete. **CONSOL P 291 AS** facilitates extreme water reduction, excellent flowability with the same time optimal cohesion and highest self compacting behavior.

CONSOL P 291 AS 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 P 291 AS as a powerful superplasticiser 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 self compacting concrete.

- Improved shrinkage and creep behavior
- Reduce rate of carbonation of the concrete
- Improved watertight behavior

CONSOL P 291 AS does not contain chlorides or other ingredients promoting corrosion of steel reinforcement. It is therefore suitable for reinforced and pre-stressed steel.

PRODUCT DATA

Form
Liquid

Appearance
Brown

Packaging
200 litres sealed drum.
1000 litre IBC's or tanker delivery on request

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

Shelf- Life
CONSOL P 291 AS be stored for 12 months if stored as recommend in unopened original containers

TECHNICAL DATA

Chemical Base
Modified polycarboxylate in water

Density
Specific density: 1.07 ± 0.01 kg/L (at 25 °C)

INSTRUCTION FOR USE

Dosage
For medium workability concrete 0.3 – 0.8 % by weight of cement

For flowing and self compacting concrete 0.8 – 1.8 % by weight of cement Pre-trials are mandatory. Please consult our Technical Service Department.



Dispensing

CONSOL P 291 AS 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 P 291 AS 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.

Cleaning of Tools

Clean all tools and application equipment with water immediately after use. Hardened/cured material can only be mechanically removed.

Notes on Application Limits

If frozen and/or if precipitation has occurred, **CONSOL P 291 AS** may be used after thawing slowly at room temperature and after intensive mixing.

Protective measure

Upon contact with skin, wash off with water and soap. In case on contact with eyes or mucous membrane, rinse immediately with clean water and seek medical attention without delay.

PRECAUTIONS

Health : **CONSOL P 291 AS** 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.