



# AW-100 (Anti-washout Admixture)

Technical Data Sheet

## Unique bipolymer anti-washout admixture for the underwater placement of concrete and grout

### Description:

**AW-100** is a unique bipolymer anti-washout admixture for the underwater placement of concrete and grout. AW-100 meets the requirements of CRD-C661-06.

**How it Works:** AW-100 increases mix cohesiveness and imparts a variable viscosity characteristic to concrete and grout. AW-100 produces concrete that becomes fluid and flowable when sheared or mechanically agitated. An example would be during pumping operations. This characteristic enables concrete to flow easily through and into confined spaces. The mix will revert to a dense, high viscous, consistency when at rest. This cohesive cement paste matrix promotes high compressive and flexural strength development.

### Advantages

**AW-100** reduces or eliminates the need to dewater underwater construction sites before concrete construction can take place. Concrete can be placed by pump or tremie directly into areas covered by water. AW-100 maintains the concrete matrix integrity during high slump placements and reduces washout from the surface during curing.

- Reduce or eliminate dewatering costs associated with underwater construction.
- Concrete is easy to pump and flows readily into available spaces.
- Segregation and dilution are reduced, in-place compressive and bond strengths are significantly increased. Laitance on concrete surface caused by cement paste washout during curing is reduced or eliminated.
- The active slump life of the concrete is doubled without extended delays in setting time.

### Uses

**AW-100** is recommended for underwater placement of concrete and grout in fresh and saltwater environments. AW-100 improves underwater "stacking" characteristics when concrete is placed by tremie operations. The ability of concrete mixtures to penetrate and consolidate foundation rock layers is dramatically improved, for example, as required in jetty sealing operations.

**AW-100** may also be used as a water reducing and anti-washout additive for placement into bentonite slurries or similar materials.

### Typical Properties\*

<b>Consistence</b>	<b>Liquid</b>
<b>Colour</b>	<b>Light Yellow</b>
<b>Specific Gravity</b>	<b>1.2±0.03@ 25°C</b>

### Dosage

**AW-100** is formulated for use at a rate of approximately 0.5 gallons per cubic yard (10 fl.oz. / #100 cwt.). This proportion is based on a nominal 660 lbs. of cement in the mix with a 0.40 water cement ratio. The amount of AW-100 must be proportionately increased when water content is increased. AW-100 if used at higher dosages may delay the initial set of concrete. Additional high range water reducing admixtures may be required to obtain desired workability of the concrete.

### Mixing

**AW-100** should be added to the fresh concrete after all the other mix ingredients have been blended together. Addition of the AW-100 directly into the concrete too early in the mixing may promote clumping of the mix materials. For best results, the concrete should be prepared in a concrete mixer that can thoroughly shear the materials and blend all of the components.

**A Perfect Chemistry...A Durable Concrete**

Turbine mixers and central mix plants often perform better than dry batched transit mixers. Insufficient mixing or use of less than recommended quantities of AW-100 may result in a concrete mix that is more likely to bleed or separate.

## Packing

**AW-100** is available in 5 gallon (19 liter) pails, 55 gallon (208 liter) drums and bulk delivery.

## Shelf Life

Shelf life when stored in dry warehouse conditions between 50 °F and 80 °F (10–27 °C) is one year

### Fire:

**AW-100** is non-flammable

## Precautions

### Health & Safety:

**AW-100** is non-toxic. Any splashes to the skin should be washed immediately with water. Splashes to the eyes should be washed immediately with water and medical advice should be sought.

### Curing:

As with all structural concrete, normal curing methods apply.

### Cleaning:

Spillages of **AW-100** can be removed with water.

## Technical Support

**Kenal Chemical** offers full technical support package to specifiers, contractors and end users, as well as technical assistance on site and after sales consultations.

Ensure the container is available for the medical attendant to examine for any relevant instructions and content details. Reseal all containers after use and ensure product is stored as instructed on the safety section of the labelling.