



Hard-Con-16-K

Mid- High Range Water Reducer / New Generation Superplasticizer Concrete Admixtures

Poly-Carboxylate Ether Admixture Long formulated polymer chain Technology / High Range Water Reducer, specially formulated with up lined Workability retention and retardation Functions in Concrete Mixture.

Uses:

Hard-Con-16-K is ideal for use in any concrete where it is desired to minimize the water/cementitious ratio yet maintain workability, **Hard-Con-16-K** is primarily intended for use in ready-mix concrete, other uses maybe simplify as below:

- Normal- High strength Concrete / Related to Admixture Dosage in Concrete.
- Slump and High Flow Concrete
- Production of concrete that can easily set to densely reinforced concrete elements.
- Production of various types of concrete such as reinforced, nu-reinforced, light, or normal concrete

Advantages:

- Increase the Durability of Concrete
- Lower viscosity, thus; supply easy pumping-ability for supplied concrete.
- Medium to high water reduction.
- Improves concrete's early and ultimate compressive and impermeability to water.
- Low Air Content
- With its high range water reducing capabilities, enables concrete production with low water / cement ratio.
- Optimize Cement Consumption.
- Supply Final fine surface for applied concrete.
- All above mentioned application are depending upon Admixture Dosage in Concrete Mixture.



HARD STONE

Hard-Con-16-K

Packaging: 1000 Kg IBC, 20 Kg Jerrycan
- 1000 Lit. IBC can be supplied upon order.

Technical Properties:

Color: turbid-Whitish Liquid.

Ph: 3.8-5.5

Density: 1.04-+0.01

Chloride Content: Nil

Consumption:

Hard-Con-16-K superplasticizer addition rates can vary with type of application but will normally range from 0.8-1.8 % Kg of Admixture by Wt. of Cementitious Binder (Cement, Fly Ash, Silica Fume and other cementitious additives). In most instances, the addition of (800 g, -1800 gm of admixture to cementitious will be sufficient.

At a given water/cementitious ratio, the slump required for placement can be controlled by varying the addition rate. Should conditions require using more than the recommended addition rates, please consult Technical Dept. in Shown contact information's.

Dosage requirements may also be affected by mix design, cementitious content, and aggregate gradations. Technical Dept. for more information and assistance.

Addition Method:

Hard-Con-16-K should be added to the concrete with the mixing water or after the addition of water to the binder to wet it first to achieve the best performance in Concrete Mix.

Over Dosage Consumption may:

- 1- May increase in compressive strength, especially with High cement content in cubic meter of concrete.
- 2- Significantly increases workability.
- 3- May lead to segregation with high water addition amount



HARD STONE

Hard-Con-16-K

Compatibility:

Hard-Con-16-K can be used with all types of Portland cement and cement replacement materials. It should not be used in conjunction with other admixtures unless technical department approval is obtained.

Standards:

Hard-Con-16-K Comply with the Standard ASTM C494 Type A, G and F Related to Admixture Addition ,Cement , Fine and Coarse Aggregate Quality.

Cleaning:

Fresh **Hard-Con-16-K** can be washed with fresh cold water.

Storage:

Hard-Con-16-K shelf life is 12 months if stored at temperatures between 5°C and 40°C in shaded area/s . If these conditions are exceeded, Hard Stone Technical Department should be contacted for advice.

Health and Safety:

Hard-Con-16-K is not classified as hazardous material. It should not come into contact with skin and eyes. In case of contact with eyes wash immediately with plenty of water and seek medical advice promptly.

The information and technical data contained in this bulletin are based on our own most updated knowledge and experiences; however, they do not amount to a guarantee.

We always Strongly recommend doing field tests trials to check the admixture performance with used Concrete Raw materials (Cement/Sand and Coarse aggregates and other materials.

Our Technical Department is at your disposal for further studies and will give its direct assistance with the use of our products, whenever needed.

3

اربييل ، العراق
المنطقة الصناعية الجنوبية
مقابل معمل رسن ستيل -اربييل -العراق

Erbil, Iraq
Southern industrial Area
In front of Rasan Steel Factory -Erbil -IRAQ

+964 772 960 4747
+964 772 960 4848
+964 772 960 4949
+964 750 452 0089