

ADVA[®] LS 500

New generation high-range water-reducing admixture

Product Description

ADVA[®] LS 500 is the latest technology in the development of high range water-reducing superplasticising admixtures. It is an innovative versatile polycarboxylic polymer developed for the premix industry to maximise performance through a wide range of concrete strengths.

ADVA LS 500 is designed to assist in the producing High performance concrete that has lower plastic viscosity & lower yield stress. These attributes will assist in enabling concrete to be pumped easier and will be " Less Sticky " than concrete made with conventional superplasticisers.

ADVA LS 500 contains no added chlorides and complies with AS 1478.1 – 2000 Type HWR. ADVA LS 500 contains no TEA. One litre weighs approximately 1.075kg \pm 0.02kg.

Dispersion

Unlike conventional superplasticisers, which rely on electrostatic repulsion, ADVA LS 500 has been formulated on carboxylic ether polymers, which are comprised of lateral chains producing superior cement dispersion. Water is absorbed by the polymer, which then allows controlled cement hydration without rapid slump loss or retardation as with conventional naphthalene superplasticisers.



Product Advantages

- Superior slump retention
- Production of lower viscosity concrete
- High compression strengths at all ages
- Improved surface finish
- Reduced vibration for placement in reinforced concrete
- Easy addition during batching process

Application

ADVA LS 500 allows concrete to be produced over a wide range of strengths, at low water-cement ratios with high placement slumps. ADVA LS 500 can produce high flow concrete for tremie and pump mixes that require extended slump life.

Advantages

- ADVA LS 500 has been developed specifically for concrete with a wide range of strengths eliminating the need for other superplasticisers for specific applications.
- ADVA LS 500 produces very high slump concrete at low water- cement ratios without segregation and loss of strength.
- It can be added at the batch plant during the batching process eliminating the need for on-site addition.
- It has superior slump retention without excessive retardation.
- Requires less vibration for ease of placement in reinforced concrete.
- Improves surface finish and off form finishes.

ADVA LS 500 is an extremely versatile superplasticiser that has a wide range of applications with superior results.

Addition Rates

Addition rates of ADVA LS 500 can vary depending on the application, however a typical dose range would be between 400 – 1200mL / 100kgs total cementitious materials. Higher dose rates can be considered for special and advanced performance. For best results ADVA LS 500 should be added to the mix water during the batching process. At a given water-cement ratio, the slump can be controlled by varying the addition rates. It is GCP's recommendation that trials are conducted beforehand to determine the optimum dose range to suit your application. If further assistance is required please consult your local GCP representative.

Compatibility

ADVA LS 500 is compatible with Portland cements including fly ash, blast furnace slag silica fume and limestone blends. ADVA LS 500 can be used with V-MAR[®] 3 to produce high quality water tolerant SCC type concretes. It is also compatible with most of the GCP range of concrete admixture, however admixtures containing melamine or naphthalene sulphonates should be avoided. All admixtures should be added to the mix separately and not premixed with other admixtures prior to addition. Please consult your local GCP representative for recommendations on compatible admixtures.

Packaging & Storage

ADVA LS 500 is available in 1,000L totes and 205L drums. Shelf life is 12 months.

Dispensing Equipment

Please contact your local GCP representative for further information regarding the dispensing equipment for this product.

Health and Safety

Read and understand the product label and Safety Data Sheet (SDS). All users should acquaint themselves with this information prior to working with the product and follow the precautionary statements. SDSs can be obtained by contacting your local GCP representative or office.

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