EPOCON VMA

Viscosity Modifier, Segregation Reducing and Anti-washout Admixture



DESCRIPTION

EPOCON VMA is a ready to use liquid based viscosity modifying admixture based on a blend of synthetic polymers. EPOCON VMA is suitable for various types of concrete. It has been found to improve properties of Self Compacting Concrete (SCC) as well as high slump conventional concrete mixes and the concrete mixes containing poorly graded sand and aggregates.

EPOCON VMA adjusts the viscosity of a concrete mix ensuring the right balance between flowability and resistance to segregation to be achieved and helps to stabilize the air void system in freshly mixed and placed concrete to increase the overall stability. This cannot be achieved by addition of water due to possibility of segregation.

TYPICAL APPLICATIONS

EPOCON VMA can be used whenever an increase in mix viscosity would be advantageous:

- SCC (Self Compacting Concrete)
- Pumped concrete
- Low fine content concrete
- Shotcrete application
- Anti-washout for under water concrete

ADVANTAGES

- Can be used with all types of cement
- Suitable for both low & high workability mixes
- Homogenous mix and eliminates bleeding
- Can prevent segregation due to grading changes.
- Does not affect setting times at given dosages
- Mixes are less sensitive to changes in water demand.
- Improved pumpability and good surface finish
- Provide a wide range of tolerance in mix water content.
- Good compatibility with SNF & PCE Superplasticizer
- Make the mixture less sensitive to variations in sand grading, shape and moisture content of the aggregates and to the characteristics of the binders.

COMPATIBILITY

EPOCON VMA is chloride free and compatible with all cements to both EN 194 and ASTM standards for reinforced concrete.

TECHNICAL SPECIFICATION

Test Name	Average Result
Form	Polymer modified Emulsion
Colour	White
Packing	1000 Ltr (Bulk)
Specific Gravity @ 20°C	1.02 ± 0.03 Kg/Ltr
pH @ 25°C	5 ± 2
Chloride content %	Nil
Consumption	0.1 to 0.75 Kg/100Kg of the cementitious material*
Shelf life	12 months indoors, without opening original package

*Note: - Dosage may varies depending on climatic conditions, mix design and other components of the concrete, hence to confirm in house trials are recommended.

REMARKS

EPOCON VMA is a ready-to-use viscosity modifying liquid admixture, which should be added to the concrete after adding all the other components to the mix.

This is a particularly important in order to obtain maximum efficacy. For best performance it is advisable to continue mixing until the mix is completely homogeneous. To produce Self Compacting Concrete, **EPOCON VMA** may be used in combination with other EPO range of Admixture products.



















APPLICATION

DISPENSING

EPOCON VMA consists of a mixture of water soluble polymers which are absorbed onto the surface of the cement granules, thereby changing the viscosity of the water and influencing the rheological properties of the mix.

TOOLS & LIMITATIONS

- Laboratory trials shall be carried out before concreting on site, especially when using a new design producing mix or new concrete components.
- Fresh concrete must be cured properly and curing applied as early as possible.
- Overdosing may result in retardation. For optimum dosage in-house trials are recommended.
- Shall not be added to dry cement.

EPOCON VMA has a dual action:

During the placement of concrete:

It decreases viscosity and maintains internal cohesion of the concrete during casting, due to shear thinning.

While the concrete is static:

It resists segregation due to aggregations of the polymer chains when the concrete is not moving.

Can be used as blended with other EPO based Superplasticizers to obtain various rheology or properties

TECHNICAL ASSISTANCE

EPO GULF SPECIALITIES; technical department with its highly trained and qualified Chemicals Marketing Advisory team provides a complete service in the field. Please consult your nearest service/sales department for assistance. Field services where provided, do not constitute any supervisory responsibilities.

PRECAUTIONS

STORAGE

EPOCON VMA should be stored in a cool, dry storage. Do not store at temperatures below 5°C or in direct sunlight. Stir well before use.

HEALTH AND SAFETY

EPOCON VMA 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.

FIRE

EPOCON VMA is non-flammable.









