

VARAPLAST VMA

VISCOSITY MODIFYING ADMIXTURE

DESCRIPTION

VARAPLAST VMA is a viscosity modifying admixture that is ready to use and is specially developed for producing concrete with enhanced viscosity and controlled rheology. Concrete with **VARAPLAST VMA** admixture exhibits superior stability, increased resistance to segregation and facilitating placement and consolidation.

RECOMMENDED FOR

- ◆ Concrete mixture requiring “more cohesiveness”
- ◆ Concrete as a pumping aid
- ◆ Concrete as a finishing aid
- ◆ Lean concrete mixtures
- ◆ Self Consolidating Concrete
- ◆ Concrete containing manufactured sand
- ◆ Concrete containing “ gap graded” aggregate

ADVANTAGES

- ◆ Facilitates production of highly fluid mixture (Self Consolidating concrete).
- ◆ Modifies viscosity of concrete
- ◆ Modifies rheological properties
- ◆ Controls bleeding
- ◆ Provides concrete stability during transport and placement
- ◆ Reduces segregation even with highly fluid concrete mixtures
- ◆ Improves pumping and finishing
- ◆ Improves surface appearances

TYPICAL CHARACTERISTICS

- ◆ **Workability** – **VARAPLAST VMA** admixture enhances workability.
- ◆ **Air Content** – **VARAPLAST VMA** admixture does not affect the air content in either air-entrained or non air entrained concrete.

- ◆ **Viscosity** – **VARAPLAST VMA** admixture will exhibit an increase in concrete viscosity with increasing dosage of the admixture.
- ◆ **Setting Time** – **VARAPLAST VMA** admixture has little to no impact on concrete setting time within the recommended dosage range of 100 – 950 gms/ 100kg of Cementitious material.
- ◆ **Compressive Strength** – **VARAPLAST VMA** admixture does not affect the compressive strength of concrete at recommended dosage.

INSTRUCTIONS FOR USE

Dosage : The recommended dosage range for **VARAPLAST VMA** admixture is 100 - 950 gms/ 100kg of Cementitious materials.

A dosage of 100-950gms/ 100 kg is recommended for typical concrete mixtures requiring “more cohesiveness” to facilitate pumping and finishing procedures.

A dosage of up to 900 gm/100 kg is recommended to provide stability in self consolidating concrete mixtures.


DOSING:

VARAPLAST VMA admixture is typically added with the initial mix water.

Alternately, **VARAPLAST VMA** may be added after all other concreting ingredients have been batched and thoroughly mixed, either at the batch plant or at the jobsite.

COMPATIBILITY

VARAPLAST VMA is compatible with most other admixtures used in the production of quality concrete including normal, mid-range and high-range water reducing admixtures, and air entraining admixtures.



VARAPLAST VMA is also compatible with typical accelerators, retarders, extended set control admixtures, corrosion inhibitors and shrinkage reducing admixtures. However a field trial is recommended to ensure appropriate performance

STORAGE

VARAPLAST VMA must be stored at temperature above 0°C and above 45°C
Protect **VARAPLAST VMA** from freezing as it cannot be reconstituted after thawing.

SHELF LIFE

VARAPLAST VMA has a shelf life of 6 months.

Curing : As with all structural concrete, normal curing methods apply.

Dispensing

VARAPLAST VMA should be dispensed using direct feed dispensing systems. Extra precautions to ensure correct dispensing is important.

PACKAGING

VARAPLAST VMA is available in 20 kg and 200 kgs drums.

HEALTH & SAFETY

VARAPLAST 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 : **VARAPLAST VMA** is non flammable.