

### MC-Bauchemie — Committed to quality

MC-Bauchemie (India) Pvt Ltd, Mumbai, provides innovative solutions in various building chemical products which are manufactured under technical and financial collaboration with MC-Bauchemie, Germany. It is an ISO 9002 certified company.

#### **Muraplast FK 61 — New generation superplasticiser for HPC**

*Muraplast FK 61* is a new generation synthetic-based superplasticiser. *Muraplast FK 61* is based on multicarboxylate ether base. By virtue of that base of superplasticiser, the performance is better than the traditional superplasticisers as far as high reduction of water-cement ratio at a given workability as well as higher slump levels at a given concrete mix composition are concerned. The dispersion mechanism of this product can be related more to steric hindrance effect, rather than to the presence of negatively charged anionic groups.

It is a suitable product for high performance concrete (HPC). At lower dosages there is a higher retention of slump as well as higher flowability. At higher dosages, the retention effect is very high retarders.

The use of *Muraplast FK 61* avoids the practice of redosing the admixtures specially in hot climates and in ready-mix concrete industry. It is a universal superplasticiser which acts both as an immediate dispersing agent and a very high slump retention agent over a long period.

On account of new generation of raw material of *Muraplast FK 61*, it makes possible to manufacture high flowability concrete requiring minimum or no compaction at very low water-cement ratios. This facilitates production of very high-strength concrete and high performance concrete. Because of low water-cement ratios, the density of the concrete is increased giving rise to dense and impermeable concrete of high durability. It is beneficial for concretes used in marine and other aggressive environments.

#### **Usage**

The dosages of *Muraplast FK 61* depend on the flow effect required. Further, the dosages also depend upon the individual requirement of retention of slump with respect to time. Preliminary trials should be conducted at the job site to determine optimum dosage. The determination of suitable dosages for exact application is of utmost importance on account of higher retardation times especially while using higher dosages.

*Muraplast FK 61* can be used for prestressed concrete upto maximum dosage of 356 ml/kg of cement as per DIN 1045. It can be used at the batching plant itself to achieve the benefit of lower rate of slump loss with respect to time. After its addition, the concrete should be thoroughly mixed so as to achieve uniform consistency.

Attention should be paid to the ASTM, BS, DIN, EN and IS specifications relating to mixing times and general conditions for the production, application and curing of concrete and prestressed concrete. All other precautions to be taken while handling and production of concrete are to be strictly adhered to.

The curing of concrete produced with *Muraplast FK 61* should begin immediately after the evaporation of bleed water.

#### **Field application**

*Muraplast FK69* is widely used in:

- ready mix concrete
- precast concrete industry
- self compacted concretes
- very high strength concrete
- concrete in aggressive environments
- underwater concreting
- concrete in marine environment and sewage treatment plants.

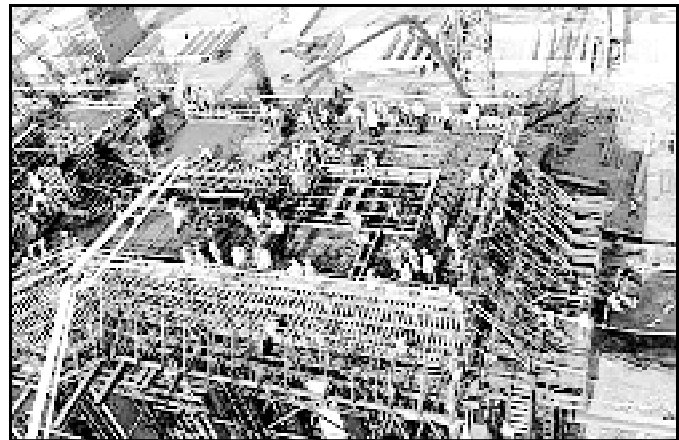
#### **Zentrment FRV— Slump retaining superplasticiser**

*Zentrment FRV* is a high early strength superplasticiser with slump retention properties especially formulated for concretes designed for high strengths. The superplasticiser based on selected polymers is free from chlorides and aids concretes in attaining high early and final

strengths. The concretes with *Zentrment FRV* are homogeneous and free from bleeding and segregation. The superplasticised concretes are pumpable and require minimum compaction.

#### **Advantages**

*Zentrment FRV* is suitable for use in RMC plants in precast industry, mass concreting, marine and massive structures where retention is necessary to keep the concrete workable, for a longer period.



**Construction of turbo generator deck, NPC, Tarapur where *Zentrment FRV* is used**

Properly designed concrete produces a homogenous workable concrete which is easily pumpable without bleeding and segregation. Its usage reduces the chances of pump blocking and reduces the abrasion in the pipelines thereby extending the life of concrete pumps.

*Zentrment FRV* enhances workability in hot weather and reduces the chances of cold joint formations.

#### **Safety precautions**

*Zentrment FRV* is non-toxic, non-inflammatory and splashes on skin should be cleaned by water.

For more details, please contact:

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