

# **ADT ADMIX MPC 3070**

# **Superplasticizer Admixture**

PC Based Water reducing slump retaining Superplasticizer

#### **DESCRIPTION**

ADT ADMIX MPC 3070 has been primarily developed for application in the ready mixed and precast concrete industries where the highest durability and performance is required. ADT ADMIX MPC 3070 is compatible with all Portland cements meeting recognized international standards and is free from chlorides and has been formulated to comply with ASTM C-494 for types A and F admixtures.

#### **TECHNICAL DATA**

- Appearance/Colour Light Red/Straw Liquid
- Form Viscous Liquid
- Specific Gravity @30°C 1.11 ± 0.02
- Chloride Content NIL

#### APPLICATION METHODOLOGY

ADT ADMIX MPC 3070 is especially suitable for the production of concrete mixes which required high early strength development. Powerful water reduction and excellent flowability

- Pumped concrete
- Fast track concrete
- Precast concrete
- Self compacting concrete.
- High Grade concrete (M-30 and Above)
- Concrete requiring long workability and long retention.

#### **ADVANTAGE**

- Pronounced increase in the early strength development resulting in very economical stripping times for precast and in situ concrete.
- Extremely powerful water reduction, resulting in high density, high strength and reduced permeability for water Excellent Plasticizing effect, resulting in improved flowability, placing and compacting behaviour.
- ADT ADMIX MPC 3070 is differentiated from that superplasticisers in that it is based on a unique polycarboxylate ether polymer with long lateral chains. Conventional superplasticisers, such as those based on sulphonated melamine and naphthalene formaldehyde condensates, at the time of mixing, get adsorbed into the surface of the cement particles. This adsorption takes place at a very early stage in the hydration process.
- The sulphonic groups of the polymer chains increase the negative charge on the surface of the cement particle and dispersion of the cement occurs by Electrostatic repulsion.





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- The long lateral chains of ADT ADMIX MPC 3070 greatly improve cement dispersion. At the start of the mixing process the same electrostatic dispersion occurs as described previously but the presence of the lateral chains, linked to the polymer backbone, generate a stearic hindrance that stabilizes the cement particles capacity to separate and disperse.
- This mechanism provides flow-able concrete with greatly reduced water demand . The excellent dispersion properties of ADT ADMIX MPC 3070 make it the ideal admixture for precast concrete where low water cement rations are required
- · Always conduct trial before combining products is specific mixes and contact our technical service department for information about specific combinations
- High water reduction.
- Excellent early and ultimate's strengths. Possibility of elimination of steam curing Less permeable. Highly durable concrete.

#### **DOSAGE**

Generally 0.4 - 1.4 % by cement . Do not allow over dossing . Due to overdosing setting time will be extanded gloriously. It is adviseable to carry out a trial to establish the exact and optimal dosage depending upon set retardation required

# **HEALTH & SAFETY**

- Use goggles and hand gloves during application
- Clean hands with warm soap water after application

### **PACKAGING**

Available in 20 kg / 235 kg HDPE drums and in bulk Tanker

#### **STORAGE**

Must be stored in original packing, in ambient temperature, dry place under shed. Protect from direct sunlight. The best use before end date of each batch appears on the product label.

## SHELF LIFE

18 months in original sealed condition under appropriate cooling condition



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