

POWER PLAST-PM

PC HIGH RANGE WATER REDUCER / SUPER PLASTICIZER ADMIXTURE

POWER PLAST-PM is high range water-reducer and super plasticizing admixture based on modified polycarboxylic (PC) polymers. It acts efficiently to give controlled workability about 180 minutes.

It meets the requirements of the following standards:

ASTM C1017/C1017 M, ASTM C494/C494 M TYPE F

EN 934-2

ISIRI 2930 Table 3&4

ADVANTAGES

- Reduces cement content in concrete
- Creating fluidity of concrete before setting (increased concrete workability)
- Design of concrete mixes with water-cement ratios in the range of 0.3 to 0.4
- Prevents bleeding and segregation of concrete
- Increases durability of concrete structures
- No needs for vibrators
- Improves concrete consistency
- Improves pumpability of concrete
- Decreases permeability and water absorption of concrete
- It can be used with all types of Portland cement including Sulphate Resisting.
- Use simultaneously with silica fume, fly ash and other pozzolanic materials
- Enables production and transportation of concrete over long distances
- Prevents cold joint
- Increases the compressive strength of concrete
- Allows reduction of curing cycles - i.e. time or temperature.

APPLICATION

- Pre-cast Concretes
- Exposed concretes
- Underwater concreting by Tremie pipe
- Concrete placement using panel, climbing and tunnel system formworks
- Concreting in thin and congested steel reinforcement sections
- Produces High Performance Concrete (HPC)
- Produces High Strength Concrete (HSC)
- Produces Self-Consolidating Concrete (SCC)
- Produces Water Resistant Concrete (WRC)
- Produces Preplaced Aggregate Concrete (PAC)

DOSAGE

The optimum dosage of POWER PLAST-PM can be determined by trials in the site. Depending on concrete mix design (sizes and types of aggregates, cement content, water/cement ratio, ambient temperature and concreting conditions), a dosage of between 0.3 and 0.8 percent by weight of cement or cementitious material is recommended.

For use with other range of dosage, contact ABADGARAN Technical Services Department.



DIRECTION OF USE

- 1-POWER PLAST-PM could be added to a part of concrete mixing water then added to the concrete mix.
- 2- POWER PLAST-PM could be added to the concrete mix during the mixing cycle at the same time as the water or the aggregate or it could be added to ready-mix concrete before placing concrete.
- 3- Admixtures must be weighed carefully.

PHYSICAL AND CHEMICAL PROPERTIES

Chemical base: modified polycarboxylic (PC) polymers

Physical state: Liquid

Color: Brown

Specific gravity: $1.11 \pm 0.05 \text{ g/cm}^3$

Chloride content: Nil to EN 934-2

STORAGE

Shelf life: 1 year in the original package

Storage condition: should be protected from direct sunlight and frost. Keep container in the temperature range between +10°C and +30°C

Packing: 22 kg container or 1000 kg tank

HEALTH AND SAFETY

This product does not contain any substances hazardous to human health and the environment. However, it should not be swallowed or allowed to be in contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water. For further information refer to the material safety data sheet.

POWER PLAST-PM is not flammable. MSDS is available at ABADGARAN website.

TECHNICAL SERVICE

The ABADGARAN GROUP Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

