

ABAGEL MODIFIED SILICA FUME GEL

DESCRIPTION

ABAGEL is a modified silica fume gel which improves the rheological properties of concrete. It is based on a highly pozzolanic materials that can significantly reduce water absorption and increases the compressive strength of concrete.

ABAGEL comprises the following chemicals:

1. Silica fume
2. Super plasticizer

This product can be evaluated using the following standards:

ASTM C1202,

BS EN 12390-8, BS 1881-122

APPLICATION

- High Strength Concrete (HSC)
- Water Resistant Concrete (WRC)
- Concrete in marine environments or exposed to chemical attacks
- Water and waste water treatment plants
- Piers, bridges, water tanks, etc.

ADVANTAGES

- Good reduction in water:cement ratio
- Good Improvement in workability & pumpability of concrete
- Reduction in cement content of concrete
- Compatible with all types of Portland cement
- Increase compressive strength of concrete
- Eliminates water absorption
- Considerable reduction in concrete permeability

DOSAGE

The optimum dosage of ABAGEL can be determined by trials in the site. Depending on concrete mix design (concrete type, workability, compressive strength, size and type of aggregates, cement content, water/cement ratio, ambient temperature and concreting conditions), a dosage of between 5.0 and 9.0 percent by weight of cement is recommended.

For using a dosage out of the above-mentioned range, contact ABADGARAN Technical Services Department.

Please contact Technical Services Department in case of simultaneously use of more than one admixture.

DIRECTION OF USE

ABAGEL can be added to concrete in two ways:

- 1- ABAGEL could be added to ready-mix concrete before placing concrete.
- 2-ABAGEL could be added to whole or a part of mixing water then added to the concrete mix.



Construction
Chemicals Producers
Membership



Iranian
Tunneling
Association
Membership



Iran Standard's Mark
Holders Association
Membership



ISO 9001:2008
TUV NORD Iran PJS



National Accreditation
Center of Iran
ISO / IEC 17025



Iranian Concrete
Institute
Membership



Ministry of Industry,
Mine and Trade
R & D Certificate

PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Slurry

Specific gravity: $1.42 \pm 0.05 \text{ g/cm}^3$

Color: Dark gray

Chloride content: No chloride content

STORAGE

Shelf life: 1 year in the original package

Storage condition: should be protected from direct sunlight and frost. Keep pail in the temperature range between $+10^\circ\text{C}$ and $+30^\circ\text{C}$.

Packing: 25 kg pail

HEALTH AND SAFETY

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

MSDS is available at ABADGARAN website.

TECHNICAL SERVICE

The ABADGARAN INTERNATIONAL 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.



Construction
Chemicals Producers
Membership



Iranian
Tunneling
Association
Membership



Iran Standard's Mark
Holders Association
Membership



ISO 9001:2008
TUV NORD Iran PJS



National Accreditation
Center of Iran
ISO / IEC 17025



Iranian Concrete
Institute
Membership



Ministry of Industry,
Mine and Trade
R & D Certificate