PURE GEL
SILICA FUME GEL

DESCRIPTION
PURE GEL is an optimized slurry with high pozzolanic activity which can increase mechanical properties and durability factors in hardened concrete and make concrete impermeable. Surprisingly it could eliminate the environmental risks of using silica fume (in powder form) and provides better dispersing quality.
It meets the requirements of the following standards:
BS EN 12390-8, BS 1881-122

ADVANTAGES
- Reduces cement content in concrete
- Improves pumpability of concrete and reduces depreciation of concreting equipment
- It can be used with all types of portland cement
- Increases the compressive strength of concrete
- Considerably reduces permeability
- Increases the abrasion resistance of concrete
- Inhibits chloride ion penetration and any other destructive chemicals influence
- Increases durability of concrete
- Increases the electrical resistance of concrete
- Reduce the risk of cracks in concrete

APPLICATION
- Reinforced and non-reinforced concrete
- Produces High Strength Concrete and Impermeable Concrete and Durable concrete
- Docks, deck bridges, channels, etc.
- Designs of concrete mixes for Water and Wastewater Treatment
- Suitable for concrete construction at risk of explosion
- Production of high strength concrete to reduce the size of structures

DOSAGE
The optimum dosage of PURE GEL can be determined by trials in the site. Depending on the optimum dosage of PURE GEL 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 6 and 10 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-PURE GEL could be added to a part of concrete mixing water then added to the concrete mix.

2- PURE GEL 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

Physical state: Slurry
Color: Dark gray
Specific gravity: 1.36 ± 0.05 g/cm3

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: 25 kg container

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.
PURE GEL is not flammable. 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.

All data presented in this technical datasheet are based on our last researches in ABADGARAN CONSTRUCTION CHEMICALS laboratories and are just as a guide for choosing appropriate material. Therefore users should conduct a sufficient investigation to establish the suitability and conformity of any product for intended uses.