# **PRODUCT DESCRIPTION**

MSG<sup>™</sup> is a modified micro silica gel including special polymer additives to enhance the fresh and hard concrete properties MSG<sup>™</sup> is supplied as a grey gel ready to use in concrete mix design. MSG<sup>™</sup> is chloride, bituminous and ammonia free.

# **PRODUCT FEATURES**

- MSG<sup>™</sup> is especially recommended for concrete requiring high early age and long term strengths, whilst maintaining the workability.
- MSG<sup>™</sup> Improve dramatically the durability of concrete, by reducing permeability and enhancing strength at all ages, furthermore the concrete will be more resistant to chemicals attack.
- MSG<sup>™</sup> enhance the fresh concrete properties by reducing bleeding and mix tendency to segregation when poor aggregates are used.
- The usage of MSG<sup>™</sup>, will make the concrete mix more cohesive which improve the pump ability.

#### **PRODUCT USES**

www.afzir.com – Concrete Admixtures

- For ready mixed mortars, the recommended consumption of the product is one bag 500gr to be added directly to the mixing water for every 25kg bag of cement mortar, such as adhesives for tiles and thermal insulation boards, base/scratch coat plasters, repair mortars etc.
- For concrete mix, the recommended consumption of the product is 4 bags (2kg) to be added for every 50kg of cement to accelerate the cure of all traditional cement mortars.
- MSG<sup>™</sup> Improves the efficiency of cement in concrete, effectively reducing the quantity of cement required to achieve specified concrete properties
- The special formulation of MSG<sup>™</sup> will improve the workability of fresh concrete and slump retention, to certain extend, without the addition of a plasticizing admixture.

# APPLICATION

- All types of cement
- Heavy prefabrication
- High performance concrete, ultra-high performance concrete
- Pre-stressed concrete
- Ready-mix concrete
- Concrete of humid, plastic or fluid consistency
- Self-levelling concrete
- High strength concrete with high workability retention
- Compatible with GGBS and Fly Ash.
- durable concrete
- Concrete with high resistance to chemicals

#### HOW TO USE DOSAGE

between 3 and 10 kg per 100 kg of cement. A 5 % dosage of the product to the weight of cement is commonly used. MSG<sup>™</sup> can be added to the water before mixing the concrete. However, it can be added to the concrete after mixing. The correct quantity of MSG<sup>™</sup> should be measured using a recommended dispenser. The optimum dosage of MSG<sup>™</sup> can only be established after trial tests, taking into account



Modified Micro Silica Gel - MSG™

local conditions, materials and specification requirements. Because local job conditions vary, please contact AFZIR for further assistance if using outside recommended dosage ranges.

# SAFETY

MSG<sup>™</sup> is not considered dangerous to handle. Please refer to the material safety data sheet for additional information.

# **DISCLAIMER OF LIABILITY**

AFZIR, LLC warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within six months of the date of purchase.

AFZIR shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory.

The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production.

Advanced Solutions Strengthening Company