

TECHNICAL DATA SHEET

# MICROSILICA POWDER (A1501)

Additive for improving strength and abrasion resistance

## DESCRIPTION

Admix A1501 powder is an ultra-fine cementitious powder (undensified silica fume) which when added to Portland cementitious mortars and concretes, radically improves the performance of the material in both its plastic and hardened states. Admix Powder improves the consistency, strength and durability of non-flow cementitious materials. The powder is supplied in 25 kg durable bags for easy use and convenient handling but requiring controlled mixing. Admix 1501 has a shelf life of 2 years.





## SPECIAL PROPERTIES

- Ultra fine: produces a fine blend of graded Portland cement.
- Improves the performance of Portland cement, aluminous and refractory cements.
- Produces composite cements which are cohesive, thixotropic, non-slumping, non-bleeding and dense.
- Helps to prevent wash-out of the cement and breakdown of materials underwater.
- Enhances the tensile and compressive strengths of Portland cementitious materials.
- Produces homogeneous, low alkali cements.
- Eliminates alkali silica reactions (ASR) and reduces carbonation with Portland cement.
- Economical, non-flammable, non-toxic, user friendly and safe to us.

## USES

- To improve the consistency and application rates of non-flow cementitious materials.
- For use to prevent bleeding and segregation, and as a pumping aid.
- As an additive to produce high strength concrete for structural applications.
- To increase the wear resistance of concrete floors and structures.
- For use in concrete to protect steel from corrosion in chemically hostile environments.
- Marine concrete and structures, chemical and fertiliser plants, food factories, cow sheds, and abattoirs.
- To reduce or eliminate alkali silica reaction ('concrete cancer') in concrete construction.
- For durable concrete in exposed hostile and extreme changes of climate.

## MIXING INSTRUCTIONS

Start the mixer. Add the admixture to the mix water and let the powder disperse. Add the remaining ingredients of the mortar or concrete and mix until homogeneous. The dosage rate is normally 7.5% by weight of cement powder contained in the mix: 7.5kg of Admix 1501 per 100 kg of cement powder.

## APPLICATION PROCEDURE

Carry out and finalise any preparation necessary before mixing and applying the mortar or concrete. Mix the ingredients pours and place.

## HEALTH AND SAFETY

Rockbond Admix 1501 (RB 6.08) powder is non-toxic and safe to use. However, use the same precautions as with any cementitious product wear goggles, protective clothing and a dust mask while mixing and applying the material.

## TECHNICAL DATA

| Analysis / Properties                             | Value                    |
|---------------------------------------------------|--------------------------|
| <b>SiO<sub>2</sub> Silicon Dioxide, Amorphous</b> | 92% min                  |
| <b>Cl</b>                                         | 0.3% max                 |
| <b>Moisture</b>                                   | <3%                      |
| <b>LOI Loss on Ignition</b>                       | Typical 3%               |
| <b>Specific surface (BET)</b>                     | 15m <sup>2</sup> /g min  |
| <b>Bulk Density – as received</b>                 | 280-400kg/m <sup>3</sup> |

## TECHNICAL INFORMATION

Should you have any queries, or require further information, please contact our **Technical Sales Team: +64 4 568 5401**