

## MULTI FLEX EXELSET 610

### Cement Admixture for Accelerating Shotcrete and Concrete

#### Specification Types

ASTM C494 Types C&E.

#### Description

MULTIEXELSET 610 a chloride-free accelerator for Shotcrete and concrete has been designed for use where no chloride or nitrate ions are allowed. It can be used with safety where these properties are called for and under low temperature conditions. The reactive components rapidly combine, even at low temperatures, with the cement paste to accelerate the hardening time of the Shotcrete / concrete.

#### Typical Applications

- \* Shotcrete in tunneling
- \* In reinforced concrete
- \* Quicker re-use of shutters in formed or moulded concrete by allowing earlier stripping
- \* An admixture used with an alternative to using Ordinary Portland Cement as a Rapid Hardening Portland Cement
- \* In concrete for repairs to floor slabs, roads and runways
- \* In cold weather concreting

#### Advantages

- \* Quick setting admixture for sprayed material
- \* No added chloride
- \* Quick support of tunnel arch sections
- \* Increases strength gain
- \* Thicker applications of Shotcrete made possible without fallout
- \* Increased bond strength
- \* Improves surface finish
- \* To increase resistance to freeze/thaw cycles

#### Typical Properties

Composition:	Calcium salt of organic acid
Colour:	Light brown speckled powder
Chloride Content:	No chloride added
Nitrate Content:	None
Finished film:	Nil
Flashpoint:	None
Storage Life:	Up to 1 year stored in accordance with manufacturer's instructions.
Dosage Rates:	2.5 kg to 5 kg per 100kg cement.

#### Directions for Use

MULTIEXELSET 610 must be added to the dry mix only however, if the Shotcrete material is to be mixed in the wet state, then it must be dissolved into the water and fed through at the nozzle. The product can be used with all types of Cement including Sulphate Resisting. For use with other special cements, contact MCC LIMPOPO

MULTIEXELSET 610 should not be premixed with other admixtures. If other admixtures are to be used in concrete containing MULTIEXELSET 610 must be dispensed separately. Consult MCC LIMPOPO.

#### Curing

It is essential to cure all concrete in order to achieve design strength and reduce moisture loss. Cure with MULTICURE Curing Compound.

#### Packaging

Supplied in 10kg and 25kg bags and must be stored in a dry environment.

#### Specification Clause

Where indicated use MULTIEXELSET 610, a high performance chloride free accelerator for concrete manufactured by MCC LIMPOPO to the following specification: MULTIEXELSET 610 is to be used in all concrete (indicate) at a dosage range of 2,5kg to 5kg per 100kg of cement strictly in accordance with the manufacturer's instructions.

#### Quality Assurance

MCC LIMPOPO production and testing programmes comply to local testing standards. These stringent testing requirements must also comply with ASTM C 494 C & E performance Specifications for Concrete and Shotcrete Admixtures.

#### Updates

This data sheet supersedes all previous issues prior to this date: 30/05/95.