

KWA – ZULU NATAL

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## MULTIFLOW 604 Accelerating Concrete Admixture with Moderate Set Accelerating Properties

### Specification Types ASTM-C494: Types C&E. as 5075

#### Part 1

#### Description

MULTIFLOW 604 ACCELERATING is specially formulated with components to provide moderate set accelerating properties. Chloride content: Within SABS 0100 Part II 1980 p.30 table 4 maximum chloride content.

#### Typical Applications

- \* In cold weather concreting
- \* In all concrete requiring high early strength (see advantages)
- \* In precast concreting to allow earlier stripping and re-use of concrete shutters and mould
- \* To use with normal Portland cement as an alternative to Rapid Hardening Portland Cement
- \* In floor slabs or road and runway paving - it provides the means of earlier finishing and prevents costly delays

#### Advantages

- \* Accelerates strength gain Of concrete al all ages
- \* Accelerates setting time
- \* Increases resistance to freeze thaw cycles
- \* Enables concreting to continue in low temperatures
- \* TO increase resistance to freeze/thaw cycles

#### Typical Properties

Colour:	Dark brown liquid
Air Entrapment:	0-1% dependant on grading of sand
Chloride Content:	See description
Nitrate Content:	
Specific Gravity:	1.34 at200c
Freezing point:	Minus 1 OOC
Flashpoint:	None
Storage Life:	up to 2 years stored in accordance with manufacturer's instructions,

**Dosage Rates:** 750ml- 2.0 litres per 100kg cement

The effects of MULTIFLOW 604 ACCELERATING are produced by a combined chemical and physical action. The chemical effect results from the combination of the calcium chloride and cement during the hydration process, resulting in the formation of a slightly different hydration process, primarily characterized by high early strength. This strength acceleration is accentuated by the action of the organic catalyst,

#### Directions for use

MULTIFLOW 604 ACCELERATING should be added to the concrete mix at the same time as the water during the mixing cycle. Never add MULTIFLOW 604 ACCELERATING to dry cement. No extension to normal mixing time is necessary.

#### Watchpoints

Under no circumstances should the dosage exceed 3.4 litres per 100kg cement. When using MULTIFLOW 604 ACCELERATING during frosty weather, care should be taken to ensure that the aggregates are free from frost. Also the cement content of the mix should not be reduced and the work should be protected by covering the concrete as soon as possible after placing.

#### Dosage

In cold weather protect the concrete against damage from frost during the critical initial hardening process, MULTIFLOW 604 ACCELERATING should be used at the rate of 1-3 litres per 100kg cement in the mix with the air temperatures down to 60C and rising. When the temperature is falling. and for temperatures between 30C and DOC, litres of MULTIFI\_OW 604 ACCELERATING per 100kg cement should be used.

#### Curing

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

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### Compatibility

MULTIFLOW 604 ACCELERATING can be used with either normal or rapid hardening Portland cement. MULTIFLOW 604 ACCELERATING should not be used with High-Alumina Cement or Cements already containing an accelerator. In the case Of Sulphate Resisting Portland Cement it is advisable before use to enquire from the cement manufacturer.

### Dispensing

The measured quantity should be added directly to the mixer at the same time as the mixing water. MULTI CONSTRUCTION CHEMICALS (PTY) LTD will install a suitable dispenser to the batching plant/ mixer "free-on-loan"

### Packaging

Supplied in 25 and 200 litre drums. Bulk deliveries are available on request. Protect from extreme temperature changes when storing drums.

### Quality Assurance

MULTI CONSTRUCTION CHEMICALS production and testing programmes comply to local testing standards. These stringent testing requirements must also comply with ASTM C 494, BS 5075 Part 1 and CRD-C87 performance specifications for concrete admixtures

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