CEMTEC 670

WATER REDUCING ADMIXTURE (TYPE A & F)

CEMTEC 670 is a poly carboxylate based plasticizing admixture for concrete which is flexible enough to use as an ASTM C-494 Type A & Type F water reducer. Excellent setting characteristics predictable response to air entrainment and outstanding slump retention makes **CEMTEC 670** ideal for all ready mix and precast concrete. When using **CEMTEC 670** at lower doses, expect better workability and higher compressive strengths. At higher doses **CEMTEC 670** demonstrates excellent slump increase, slump retention and higher compressive strengths. **CEMTEC 670** can be used to accommodate tough to reach mid-range needs, high range water reduction, as well as self-consolidating concrete. **CEMTEC 670** does not contain calcium chloride or other potential corrosion enhancing ingredients.

PRIMARY APPLICATIONS

- Ready mix concrete
- Precast concrete
- Cast in place
- Self-consolidating concrete

FEATURE / BENEFITS

Plastic Concrete

- Improves finishability
- Improves workability
- Reduces water requirement
- Improves setting times
- Superior slump retention

Hardened concrete

- Increase early and late age strengths
- Reduces permeability
- Increases durability

PACKAGING

CEMTEC 670 is packed in bulk, 1000 liter IBC Tanks, 210 liters drums and 20 liters pails.

SPECIFICATIONS / COMPLIANCES

CEMTEC 670 meets or exceeds the requirements of

- ASTM C-494, Type A and Type F
- AASHTO M-194

TECHNICAL INFORMATION

Physical Properties

Specific Gravity.....1.04
Freeze Point.....20ºF (-6.7ºC)
Color..... Light Amber

PERFORMANCE

Mix Design: 360 kg/m^3 of Type I portland cement in air entrained concrete with a 0.45 water to cement ratio. **CEMTEC 670** was dosed at 1 liter per 100 kgs of cement and plastic properties measured over 1 hour.

Slump

Initial Slump (mm) 225
Slump @ 60 minutes 190

Air Content

Initial Air Content 8.0%
Air Content @ 60 minutes .....7.2 %

Initial setting Time 4.06

Compressive Strengths:psi (MPa)

1 day 2103 (14.5)
28 day 5298 (36.5)

Dosage Rates

ASTM-C-494 Type A

CEMTEC 670 will achieve ASTM C-494 Type A performance at dosages of 130- 200 ml per 100 kgs cement.

Mid Range

For mid-range performance, **CEMTEC 670** can be used at the rate of 260 - 390 ml per 100 kg of cement.

ASTM C-494 Type F

CEMTEC 670 can be used at the rate of 460 - 650 ml per 100 kgs of cement for high range admixture performance.

SELF-CONSOLIDATING CONCRETE

Dosage of **CEMTEC 670** to make SCC will vary depending on mixture design. Trial mixtures should be run to verify plastic and hardened perofrmance with local materials. Contact your local CMCI sales representative for trial mixtures and dosing recommendations.

DIRECTIONS FOR USE

Should be added to sand or water. It should not come in contact with dry cement or other admixtures until mixes thoroughly with the concrete batch. **CEMTEC 670** is dispensed with automatic equipment, thus insuring uniformity of admixture use through the job.

"High Quality Construction Chemicals"
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Shelf Life: 2 years in original, unopened package.

PRECAUTIONS / LIMITATIONS

- Care should be taken to maintain above freezing; however, freezing and subsequent thawing will not harm the material if throughly agitated.
- Never agitate with air.
- Add to concrete mix independent of other admixtures.

TD/PDS/0307/B

QUALITY STATEMENT

CMCI manufacture its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with Quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products. CMCI also offers full technical field support to consultants, Architects, Contractors, applicators and End Users