Technical Data Sheet

FLOCRETE CF

Chloride free accelerator / frost proofer

- An effective admixture for cold weather working and emergency repair work

ADVANTAGES:

Reinforcement: Ferrous reinforcement will be free from chloride corrosion.

For Winter working: Accelerates the rate of setting, strength gain and heat evolution to give normal working at low temperatures. Less susceptibility to frost damage for fresh concrete.

Fast Setting: High early strength is invaluable for emergency repairs and tidal work where speed is essential.

Plasticising action: Enables a reduction to made in the water/cement ratio.

PRODUCT:
Chloride free accelerating admixture for concrete, with plasticising action.

PURPOSE:
To accelerate the setting and hardening of concrete.

USAGE:
Ready for use. Addition rates of approximately one litre per 50 Kgs of cement.

PACK:
20, 50, 100 litres Carbuoy / drums.

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INTRODUCTION:
During cold weather working concreting raises two main problems:

1. Delayed setting – the rate of gain in strength is considerably retarded and site operations are delayed.
2. Reduction in ultimate strength: The formation of the ice crystals in freshly placed concrete disrupts the cement paste and prevents the concrete from attaining its full ultimate strength.

FLOCRETE CF is a chloride-free accelerating admixture which makes it ideal for use in the cold weather working of reinforced concrete.
FLOCRETE CF offsets the effect of low temperatures by accelerating the rates of setting, strength gain and heat evolution. Work can be continued under adverse weather conditions without detriment to the quality of the concrete and without fear of chloride corrosion.

Under normal conditions the high early strength given to a mix by FLOCRETE CF is of value in emergency repair work.

For concrete or mortars made to a fixed workability, the plasticising action of FLOCRETE-CF enables a reduction of up to 10% to be made in the water/cement ratio.

Properties

Composition	a chloride free solution containing a blend of Accelerators suitable for use with all types of Portland cement
Colour	Straw
s.g.	1.17
Acceleration	The following tables Acceleration properties obtained at 20 degree C. For a standard concrete Ix (300 g cement/msq)

Property / Dosage of FLOCRETE C.F.	Nil	One Ltr/50Kg
Slump (/mm)	75	75
Water/cement ratio	0.55	0.50
Setting time (/mins)		
Initial	330	200
Final	460	295
Compressive Strength		
(/N/mm^2) at 1 day	7.5	9.0
3 days	16.9	22.6
7 days	20.7	25.0

When to use
Cold weather working: When the temperature falls below 5 degree C the strength development of concrete may be significantly affected. This can be counteracted by the use of Flocrete CF giving increased rates of production due to the higher early strengths of the concrete.
This material is ideally suited for use in precast concrete production.

How to use
Flocrete CF is supplied ready for use and should be added to the gauging water. It should not be added neat to the dry mix.
Aggregates should be covered and must be free from ice/frost at the time of use. (The use of heated mixing water is a valuable precaution)
It is essential that the hardening rate is maintained by conserving the heat evolved within the concrete. Fresh concrete must be protected immediately after placing with waterproof covers such as polythene sheeting. Insulated covers or similar are an added benefit. Freshly placed concrete must not be allowed to become frozen or it will be permanently damaged.

Compatibility
FLOCRETE CF is incompatible with FLOCRETE N, FLOCRETE HP and SETCRETE RMW when pre-mixed prior to dispensing, but may be used in conjunction with these admixtures if added separately to the mix.
FLOCRETE CF is incompatible with retarding plasticisers and retarding superplasticiser even when added separately.

Dosage:
Normal acceleration of hardening for emergency repairs and similar operations the dosage of FLOCRETE CF should be approximately 1 litre per 50 Kg Cement.
At low temperatures or for greater acceleration: higher dosages may be used but the exact dosage should be determined by site trials.

Storage:
FLOCRETE C.F. should be stored in manufacturers sealed containers in frost-free conditions and out of direct sunlight.

Handling Precautions:
FLOCRETE CF is toxic. Do not ingest. Should ingestion occur an emetic of common salt in water should be given and medical advice sought. Prolonged contact with the skin should be avoided, any splashes washed off with clean water. Any splashes to the eyes should be washed off with clean water immediately and medical advice sought.