

PRODUCT :

- (i) Appearance : Bright greyish white fine powder or light-brown clear liquid.
- (ii) pH : 8.5 to 9.5 at 30°C.
- (iii) Chloride : Nil.
- (iv) Storage Life : Excellent, if stored in sealed original sacks under dry conditions. The liquid to be stored in original unopened packing.
- (v) Handling : There are no fire or health hazard
- (vi) Packing : Powder : 40 kg. in High density Polyethylene bags. ½ and 1 kg. Poly-bag on request.
- Liquid : 220 kg. Steel Barrels

The product is polymer based chemical compound specially formulated to accelerate the normal setting time of concrete to increase the early strength development, as well as the ultimate strength, and to provide cold weather protection.

TEST RESULTS :**I. MORTAR :**

Tests conducted on Cement : Sand=1 : 3 mortar as per I.S. : 269-58 showed following results :

TESTS	CONTROL	WITH 1.0% CEMWET - ACC.
Initial set, minutes	180	80
Final set, minutes	250	125
Compressive Strength, 24 Hrs. kg./cm ²	80	151

II. CONCRETE :

In concrete mix of same slump and cement content, CEMWET - ACC develops high early and ultimate strength.
MIX DETAILS : OPC 350-kg/m², zone 2 Sand 20%, 5-20 mm Crushed Aggregates 74%.
Dosage : 1.0% by weight of cement

PARTICULARS	REFERENCE CONCRETE	CONCRETE WITH CEMWET - ACC
1. Cement, kg/m ²	350	350
2. Water, kg/m ²	210	178.5
3. Reduction of Unit Water content (%)	NIL	15.0
4. W/C ratio	0.6	0.51
5. Slump in mm	55	60
6. Compressive Strength: (Xg/cm ²)		
1 day	30.25	51.0 (170 %)
3 days	88.50	135.0 (52 %)
7 days	163.45	216.0 (32 %)
28 days	253.00	304.0 (20 %)

DOSAGE :

Under normal circumstances, CEMWET-ACC be added at a rate of 0.5 to 1.0% by weight of cement. A higher dosage is recommended in cases where extra-ordinary quick set is required, or in colder climates. The maximum dosage is 5% by weight of Cement. Best results are obtained with the recommended dosage, if the C₃A content in the cement is low and not more than 10%.

CEMWET-ACC should be strewed on the concrete prior to or during mixing process. The mixing time should be at least one minutes after the last portion of CEMWET-ACC is added. The prolongation of mixing operation is not necessary.

TECHNICAL SERVICES :

Technical Advisory service is maintained to assist in carrying out field evaluation tests and for advice on proper selection of admixture, its utilisation and improvements in the quality of concrete.

The product is useful for reducing period of curing. Its use has been ideal for emergency constructions and in all those jobs where a structure is to be put in service within the shortest possible time. It is compatible with all types of Portland, Pozzolana and Stag Cements and provides the same results as the Rapid Hardening Cement. It satisfies all requirements of I.S. : 9103-79, B.S : 5075 part 1-1974 and A.S.T.M. - C494-657.

ADVANTAGES :

- ★ Reduces water requirements, bleeding, shrinkage and time required for initial set.
- ★ Increases workability, early strength, ultimate strength, density and wear resistance.
- ★ Permits earlier and easier concrete finishing.
- ★ Speeds the use of concrete floors by accelerating the set.
- ★ Permits early removal of forms so that less number of forms are required.
- ★ Cuts down protection time.
- ★ Uniform curing, winter and summer, cures concrete faster in summer, reduces amount of protection required in winter.

ECONOMICAL GAINS :

On account of fast setting as well as hardening properties, plasticizing and water reducing characteristics of CEMWET-ACC, leaner mixes can be used to meet the specified strength requirements. Also earlier removal of form work, its reutilisation, less number of days for curing, increase in speed of construction, all counts towards the economical gains obtained with the use of CEMWET-ACC.

OUR RANGE OF PRODUCTS :

Concrete & mortar admixtures including superplasticizers, Accelerators, Retarders, Air-entraining Agents, Sealing & Water-proofing Compounds, Non-Shrink Grouting Agents, Grouting Compound, Bonding Agents, Finishing Products; Mould Coating & Release Agents, Surface Retarders, Concrete Hardens & Dust-proofers, and several others.