



PACKING :
50,220 Litres

A Poly Carboxylic Based

An unmatched the ultimate admixture for cement concrete. Specially developed for delaying hydration of cement with reduced cement water ratio at a given workability by increasing compressive strength at all ages without affecting the long term mechanical properties of cement.

In cement concrete phenomenon of **SPC-99** is observed as under :

- 1) Facilitate transportation of readymix concrete (RMC) over long distances even in hot climates without loss of strength.
- 2) Mass concrete and high reinforcement concrete structures where construction joints have to be avoided.
- 3) Cementation of oil wells, ready mix oil well cement.
- 4) High quality concrete pours which demand good workability throughout placement in large section.
- 5) Hot weather concreting with long and difficult pours.
- 6) Produces extremely workable, high strength, pumpable water tight dense concrete.
- 7) Produces durable, crack resistance, frost resistance deicing salt resistance concrete.

TEST RESULTS CONDUCTED ON CONCRETE USING SPC-99

MIX : Cement (OPC) + Sand = 32%
Crushed Aggregate (5-20 mm) = 68%

Description of mix	Dosage ml/kg of Cement	W/C	Cement Content kg/m ³	Slump (mm)		Compressive strength (kg/cm ²)		
				'0' min	'30' min	3 days	7 days	28 days
Control	-	0.62	308	045	-	120	165	243
Increased Workability	6.00	0.62	308	175	100	140	198	270
Increased Strength	8.00	0.55	308	040	10	170	225	335
Cement Saving	-	0.50	380	040	-	180	240	380
	8.00	0.50	342	040	-	-	250	395

Many Fold Advantages :

- ❖ High workability
- ❖ High Strength at all stages
- ❖ High slump retention
- ❖ High retardation
- ❖ High water reduction
- ❖ Highly durable concrete
- ❖ High increase in the surface area
- ❖ Lower W/c ratio: reduction 10% to 25%
- ❖ Improve surface finish
- ❖ Easier placing & compaction.
- ❖ Reduces risk of segregation
- ❖ Crack resistant
- ❖ Free flow concrete
- ❖ Cohesive pumpable mix
- ❖ No bleeding
- ❖ Allows more time for handling
- ❖ Decrease water permeability
- ❖ No toxic
- ❖ Smooth hot weather concreting
- ❖ Better thermal insulation
- ❖ No corrosion.
- ❖ Avoids cold joints
- ❖ Less energy for curing
- ❖ No honey combing
- ❖ Frost resistant
- ❖ Deicing salt resistant
- ❖ Cement saver
- ❖ Chloride free

Area of Application

Most suitable for construction of high ways, roadways, aprons & hard standings, very useful in dams, reservoirs, power station, under ground tanks etc. Ideal for ready mix plants, pre-cast concrete, prestressed concrete, hot weather concrete closely space & areas, large bay areas, floor slabs, bridge decks and other areas when high slump property is required.

HOW to Use

- 1) As per the job condition in general add **100ml. to 500ml.** of SPC-99 with required gauging water for every 50kg. cement in the concrete/ mortar mix. Cure as per the construction norms.
- 2) Effect of SPC-99 may vary with cement type, grading of sand, size & shape of aggregates, temperature, other job conditions etc. Therefore to facilitate addition and to prevent over dosing, it is advised to determine on trial mixes the actual dosage.