

ECONEX® CooNa-230L

High-Range Water-Reducing Admixture

Introduction

ECONEX® CooNa-230L is a polycarboxylate ether based high performance copolymer designed for highest concrete quality. It enables concrete to be produced highly workable at low dosage with improved slump retention. It increases early strength without affecting concrete's total compressive strength.

Properties

- Appearance : Light yellow liquid
- Specific Gravity(20°C): 1.05±0.05
- pH(20°C) : 6.5±2.0

Advantages

- Reduces water content, maintaining the same workability
- Improves durability
- Extends slump life
- Increases high early strength
- Reduces bleeding at high slumps
- Promotes usage of cementitious supplementary materials such as fly ash, blast furnace slag, and silica fume
- Improves pumpability
- Decreases bug holes

Dosage

- 0.5~4.0% wt. % of total binder
- The dosage range is applicable to most concrete mixtures using typical concrete ingredients. However, variations in job conditions and concrete materials, such as silica fume, may requires dosages outside the recommended range.

Test results

[High Flowing, Ultra High Strength Concrete Test Lab. test]

Mix design

	W/C (%)	S/A (%)	Unit Weight(kg/m ³)					AD (Bx%)
			W	C	F/A	S	G	
I	34.0	47.0	163	408	72	803	916	1.3
II	30.0	45.0	163	435	109	739	914	1.3
III	28.0	44.0	163	466	116	708	911	1.4

Materials C : OPC(S.G. 3.15) F/A : Fly Ash(S.G. 2.20)
S : River Sand (S.G. 2.62) G : Crushed Gravel (S.G. 2.65)
AD : ECONEX CooNa-230L

Test results

	Slump Flow (mm)			Air (%)		
	0 min.	30 min.	60 min.	0 min.	30 min.	60 min.
I	720/720	690/700	660/670	4.9	4.4	4.1
II	710/710	700/710	660/670	4.8	4.0	3.1
III	580/590	640/650	620/630	3.2	2.5	2.4

	Setting Time		Compressive Strength(MPa)					
	Initial	Final	16h	18h	24h	3day	7day	28day
I	9:40	12:05	7.8	11.3	17	32.6	37.8	55.5
II	9:55	12:15	9.7	14.6	21.1	36	43.2	61.7
III	9:15	11:30	10.4	15.2	23.2	37.4	50.6	72.3

Caution

- ECONEX® CooNa-230L is a non-toxic and non-flammable; however, if contaminated, please wash thoroughly
- If mixed with other admixtures, it may form precipitates or gel. Please use separately
- If frozen, thaw and agitate thoroughly
- Use after approximately 10 minutes pre-mixing

Packaging

- 200 liter drum
- 1,000 liter drum
- Flexitank

