EUCON 37

HIGH RANGE WATER REDUCER - SUPERPLASTICIZER

DESCRIPTION

EUCON 37 is a high range water-reducing admixture. It may be added to the concrete at the job site or at the ready mix concrete plant. EUCON 37 is formulated to retain plastic consistancy for 30-60 minutes after dosing depending on the initial slumps, dosage rates, and ambient temperature. No chlorides are used in its formulation; consequently, it is recommended for prestressed concrete. It is also compatible with air-entraining agents, waterproofing agents, calcium chloride and many other admixtures; however, each material should be added to the concrete separately.

PRIMARY APPLICATIONS

- · High performance concrete
- · General ready mix concrete
- · Heavily reinforced concrete

- · Flatwork and mass concrete
- · Minimum water content concrete
- · Low water/cement ratio concrete
- · High slump, flowable concrete

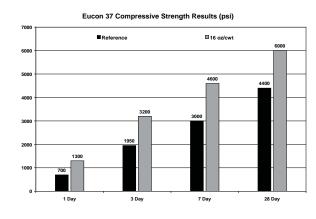
FEATURES/BENEFITS

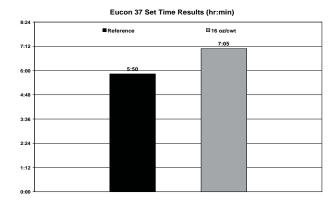
- Produces low water content and low water/cement ratio concrete allowing higher strengths
- · Produces flowing concrete with better than normal strengths
- · Aids in concrete placement and reduces labor cost
- · When used in precast work with Type I cement will produce the high early strengths

TECHNICAL INFORMATION

Performance Data:

The following test results were achieved using typical ASTM C 494 mix design requirements, 517 lb/yd³ (307 kg/m³) cement content and similar (± 0.5)% air content. These results were obtained under laboratory conditions with materials and mix designs meeting the specifications of ASTM C 494. Changes in materials and mix designs can affect the dosage response of EUCON 37.







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PACKAGING

EUCON 37 is packaged in bulk, 275 gal (1041 L) totes, 55 gal (208 L) drums and 5 gal (18.9 L) pails.

SHELF LIFE

2 years in original, unopened package.

SPECIFICATIONS/COMPLIANCES

- Fully complies with the requirements of ASTM C 494, Types A & F admixtures.
- Fully complies with the requirements of AASHTO M 194.
- ANSI/NSF STD 61

DIRECTIONS FOR USE

EUCON 37 can be added to the initial batch water or directly on the freshly batched concrete and mixed for approximately 5 minutes or 70 revolutions. However, better results have been observed batching directly on the freshly batched concrete. It should not come into contact with dry cement or other admixtures until mixed thoroughly with the concrete batch.

EUCON 37 is typically used at dosages of 6 to 18 oz per 100 lbs (400 to 1170 mL per 100 kg) of cementitious material. Other dosages are acceptable with prior testing and confirmation of the desired performance with specific materials being used.

For any concrete application including Self-Consolidating Concrete (SCC), the dosage of EUCON 37 will vary depending on the mix design, local materials, and individual needs of the concrete producer. Trial mixes should be run to verify plastic and hardened performance with local materials. If the material gradations are not optimum for SCC, a viscosity modifier may be used to improve the quality of the mix. Please consult a local Euclid Chemical Sales Professional for trial mixtures and dosage recommendations. EUCON 37 is compatible with most admixtures including air-entraining agents, accelerators, most water-reducers, retarders, shrinkage reducers, corrosion inhibitors, viscosity modifiers, and microsilica; however, each material should be added to the concrete separately.

Figure 1:Recommended Dosage of Eucon 37 to achieve flowable concrete (7 - 9"/ 180-230 mm slump)

Initial Slump, inches (mm)	Dosage Range of Eucon 37, oz/cwt (mL/100 kg)
4 (100)	8 - 10 (520 - 650)
3 (75)	10 - 12 (650 - 780)
2 1/2 (65)	12 - 14 (780 - 910)
2 (50)	14 - 16 (910 - 1040)
1 1/2 (40)	16 - 18 (1040 - 1170)

Placement

Concrete treated with EUCON 37 may be placed in the same fashion as conventional concrete.

Formwork

Forms for walls or narrow sections must be watertight, strong and have good bracing. During the "flowing period", when the concrete is at a slump of 7" to 9" (180-230 mm), the concrete will exert a higher pressure at the base of the form than conventional concrete. Formwork for slabs is the same as for conventional concrete.

PRECAUTIONS / LIMITATIONS

- Care should be taken to maintain EUCON 37 above freezing; however, freezing and subsequent thawing will not harm the material if thoroughly agitated. Never agitate with air or an air lance.
- Keep concrete from freezing until a minimum strength of 1000 psi (7 MPa) is reached.
- In all cases, consult the Material Safety Data Sheet before use.

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