#### HIGH RANGE WATER REDUCERS / SUPERPLASTICIZERS

Master Format #: 03 30 00 03 40 00 03 70 00

# EUCON™ 37

# HIGH RANGE WATER REDUCER - SUPERPLASTICIZER



#### PRODUCT INFORMATION

### **PACKAGING**

Packaged ackaged 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 container

#### SPECIFICATIONS/COMPLIANCES

ASTM C494, Type A & F ASTM C1017 Type I AASHTO M194

## **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 consistency for 30-60 minutes after dosing, depending on the initial slumps, dosage rates, and ambient temperature. EUCON 37 contains no added chlorides or chemicals known to promote the corrosion of steel. It is also compatible with air-entraining agents, waterproofing agents, accelerators and many other admixtures; however, each material should be added to the concrete separately.

#### PRODUCT CHARACTERISTICS

#### **FEATURES & BENEFITS**

- Improves workability / finishability
- Reduces water requirement
- Good slump retention, extending of setting time
- Increases strength
- Improves finished appearance
- Increases durability
- Aids in concrete placement and reduces labor cost
- Will produce the high early strengths when used in precast work with Type I cement

#### **PRIMARY APPLICATIONS**

- Flatwork and mass concrete
- Prestressed concrete
- Low water/cement ratio concrete
- High slump, flowable concrete
- High performance concrete
- · General ready mix concrete
- Heavily reinforced concrete

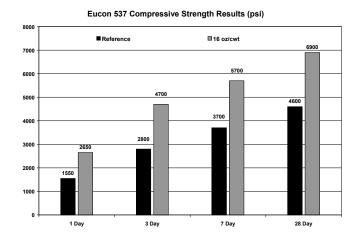
# PRECAUTIONS/LIMITATIONS

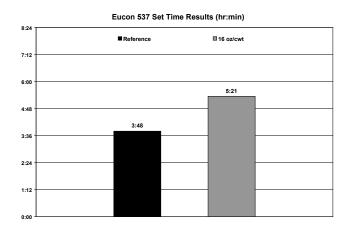
- Care should be taken to maintain Eucon 37 above freezing; however, freezing and subsequent thawing will not harm the material if thoroughly agitated. Do not agitate with air or an air lance.
- Add to mix independent of other admixtures.
- In all cases, consult the Safety Data Sheet before use.

#### **TECHNICAL INFORMATION**

#### PERFORMANCE DATA

The following test results were achieved using typical ASTM C494 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 C494. Changes in materials and mix designs can affect the dosage response.





## **DIRECTIONS FOR USE**

Eucon 37 has a recommended dosage of 6-18 oz/100 lbs (400-1170 mL/100 kg) of cementitious material and can provide excellent performance for most applications at dosage rates of 6-10 oz/100 lbs (400-650 mL/100 kg) of cementitious material. For SCC concrete or high performance mixtures dosage rates of 10-18 oz/100 lbs (650-1170 mL/100 kg) of cementitious material can be used. Dosage recommendations depend on the characteristics of the materials being used in the mix design. Higher dosages are acceptable with prior testing and confirmation of the desired performance with specific materials used. 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.

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. 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 7-9 inches (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.

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/100 lbs (mL/100 kg)
4 (100)	8 - 10 (520 - 650)
3 (75)	10 - 12 (650 - 780)
2 ½ (65)	12 - 14 (780 - 910)
2 (50)	14 - 16 (910 - 1040)
1 ½ (40)	16 - 18 (1040 - 1170)

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