### THE EUCLID CHEMICAL COMPANY



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## ACCELGUARD® 80

### NON-CHLORIDE, ACCELERATING WATER REDUCING ADMIXTURE

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ACCELGUARD 80 is an accelerating, water-reducing admixture for concrete that does not contain calcium chloride or added chloride ions. It improves properties of plastic and hardened concrete, provides a significant improvement in early stiffening and setting characteristics, improved workability and decreased bleeding and segregation. This admixture is compatible with air-entraining admixtures, HRWR admixtures (super plasticizers), and conventional water reducing admixtures.

### **PRIMARY APPLICATIONS**

- Cold weather concreting
- Structural and plain concrete
- Concrete block and mortar
- Precast and post tensioned concrete

### **FEATURES/BENEFITS**

- Reduces initial set 1-4 hours depending on concrete temperatures
- Improves workability and provides denser concrete
- Minimizes bleeding and segregation
- Improves compressive strength development at early ages
- Decreases overtime allowing earlier finishing
- Increases protection for reinforcement in concrete

### SPECIFICATIONS/COMPLIANCES

- Formulated to comply with ASTM C-494, Type C and E admixture.
- Formulated to comply with AASHTO M-194.
- ACI 201, Guide for Durable Concrete and ACI 302
   Guide for Concrete Floor and Slab Construction
   prohibit the use of chlorides in many types of
   concrete. ACCELGUARD 80 may be used in these
   types of concrete such as, floors over prestressed
   concrete or galvanized decking, floors containing
   two kinds of embedded metal, reinforced concrete
   in moist environments and/or exposed to chloride
   deicing salts.

# TECHNICAL INFORMATION Typical Engineering Data Concrete Temperature

oncrete Temperature 50°F\* 35°F\* (10°C) (2°C)

AirTemperature  $40^{\circ}\text{F}$   $24^{\circ}\text{F}$   $(4^{\circ}\text{C})$   $(-4^{\circ}\text{C})$ 

Cement 564 lb/yd³ 564 lb/yd³ (335 kg/m³) (335 kg/m³)

ACCELGUARD 80 16 oz/cwt 24 oz/cwt (1000 ml/100 kg) (1560 ml/100 kg)

Slump 4.5" 2.75" (114 mm) (70 mm)

Air 3.2% 1.8%

Average 3 day 2,825 psi 1,478 psi Compressive Strength (19.5 MPa) (10.2 MPa)

Average 7 day 4,138 psi 3,257 psi Compressive Strength (28.5 MPa) (22.5 MPa)

Average 28 day 5,371 psi 5,229 psi Compressive Strength (37.0 MPa) (36.1 MPa)

Initial Set 5 hrs. 48 min. 7 hrs. 46 min.

(1.5 hrs less than (1.5 hrs less than reference mix) reference mix)

\*Average concrete temperature at or during the test. **Shelf Life:** 2 years in original, unopened package.

ACCELGUARD 80 is used @ 16-32 oz/100 lb (1000 ml/ 100 kg) of cement for most work with the exception of concrete block production. As the quantity is increased, the acceleration of setting time and strengths are increased. An Accelguard 80 technical data sheet detailing its use for masonry mortar is available and may be found in Section 2.

### **DIRECTIONS FOR USE**

For use in concrete add ACCELGUARD 80, with water and aggregate, to the ready mix concrete truck, but do not dispense onto dry cement. For temperatures 32°F-60°F (0°-16°C) add to concrete at the rate of 16 oz/100 lb of cement (1000 ml/100 kg), depending upon the desired rate of acceleration, early strength gain, stripping schedule, etc. For use in concrete block production in temperatures 32°F-60°F (0°-16°C), dose at 5-12 oz/100 lb of cement (325-780 ml/100kg). For temperatures below 32°F (0°C), heat aggregate and use warm water so that concrete temperatures, when mixed, are above 60°F (16°C). When air temperatures are below 50°F (10°C) follow ACI 306, "Recommended Practice for Cold Weather Concreting". For temperatures above 60°F (16°C) ACCELGUARD 80 dosage may be reduced.

For information regarding freeze resistant concrete, please contact your local Euclid Chemical sales representative. The Euclid Chemical Company recommends the contractor follow typical cold weather masonry practices.

### **PACKAGING**

ACCELGUARD 80 is packaged in bulk, 275 gal (1041 liter) totes, 55 gal (208 liter) drums and 5 gal (18.9 liter) pails.

### **CLEAN-UP**

Clean tools and equipment with water before mortar hardens.

### PRECAUTIONS/LIMITATIONS

- ACCELGUARD 80 will freeze at temperatures of approximately -15°F (-26°C). Freezing and thawing will not harm the material if thoroughly agitated.
- Do not use air for agitation.
- Do not dispense directly onto dry cement.
- Do not use ACCELGUARD 80 with Chemcomp Cement or other modified cements without con sulting The Euclid Chemical Company.
- Keep mortar from freezing until a minimum of 1000 psi (7 MPa) is achieved.



Form Accelguard 80-6.01