

ACCELGUARD® 90

NON-CHLORIDE, ACCELERATING & WATER REDUCING ADMIXTURE

Euclid
Concrete
Admixtures



DESCRIPTION

ACCELGUARD 90 is a ready to use accelerating, water reducing liquid admixture for concrete that does not contain calcium chloride or added chloride ions. It increases early strength at low temperatures and is especially effective in extremely cold temperatures as low as 20°F (-7°C) using a cold weather admixture system. ACCELGUARD 90 also will increase workability of the concrete and reduces bleeding and segregation. This product is compatible with most other admixtures commonly used in conventional concrete. ACCELGUARD 90 is effective in concrete of any temperature, it is particularly effective in freeze-resistant concrete admixture systems.

PRIMARY APPLICATIONS

- Cold weather concreting
- Structural and plain concrete
- Precast and post tensioned concrete

FEATURES/BENEFITS

- Reduces initial set 1 to 6 hours depending on concrete temperatures
- Cuts construction costs - concrete placing cycle is accelerated
- Improves workability and provides denser concrete
- Minimizes bleeding and segregation
- Improves compressive strength development at early ages
- Decreases overtime allowing same day finishing

TECHNICAL INFORMATION

Technical Information

Mild Weather

Mix Data

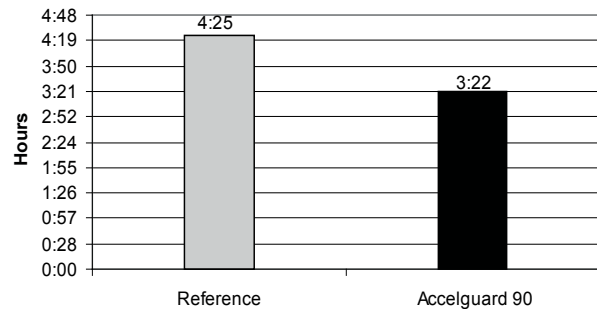
Type I cement, lb/yd ³ (kg/m ³)	517 (306)
Air content	7% (± 1)
Ambient temperature	73° F (22.8° C)
Concrete temperature	73° F (22.8° C)
Accelguard 90 dose	10 oz/cwt (652 mL/100 kg)

Cold weather

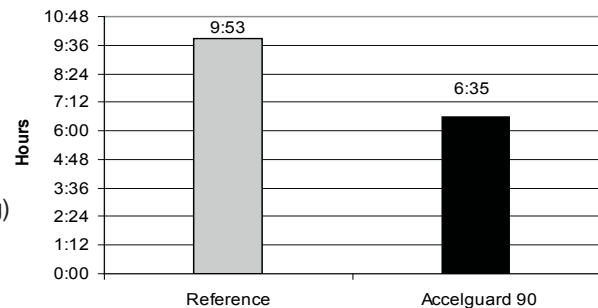
Mix data

Ambient temperature	38° F (3.3° C)
Concrete temperature	47° F (8.3° C)
Accelguard 90 dose	16 oz/cwt (1043 mL/100 kg)

Setting Times



Setting Times



ACCELGUARD® 90
Non-chloride, Accelerating Water Reducing Admixture

Master Format #: 03 3000

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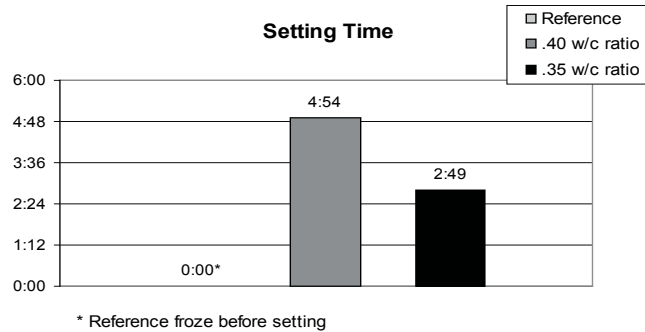
An **RPM** Company



Sub-Freezing Weather

Mix Data

Type I Cement, lb/yd ³ (kg/m ³)	600 (356)
Air Content	7% (±1)
EUCON SPC, oz/cwt (mL/100 kg)	.40 w/c ratio 6 (391) .35 w/c ratio 9 (587)
Accelguard 90, oz/cwt (mL/100 kg)	75 (4890)
Ambient Temperature	20°F (-7°C)



PACKAGING

ACCELGUARD 90 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 ASTM C 494, Type C and E admixture specifications.
- AASHTO M 194.
- Tested using the specifications from ASTM C 1622 for cold weather admixture systems.
- 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 90 may be used in these types of concrete such as: floors over pre-stressed concrete, reinforced concrete in moist environments and/or exposed to chloride deicing salts.

DIRECTIONS FOR USE

Add ACCELGUARD 90 with water and aggregate to the ready mix concrete truck, but do not dispense onto dry cement. For temperatures 20°F to 40°F (-7° to 4°C) add to concrete at the rate of 10 to 75 oz/cwt (625 to 4890 ml/100 kg) of cement, depending upon the desired rate of acceleration, early strength gain, stripping schedule, etc. In some cases, the dosage could go as high as 90 oz/cwt (5868 ml/100 kg). Consult a Euclid Chemical representative before using dosages exceeding 75 oz/cwt (4890 ml/100 kg). When air temperatures are below 50°F (10°C) follow ACI 306, "Recommended Practice for Cold Weather Concreting" unless dealing with freeze resistant concrete systems using Euclid Chemical admixtures. In such cases please contact your local Euclid Chemical sales representative for proper recommendations. ACCELGUARD 90 is used @ 10 oz to 75 oz/100 lb (625 to 4890 ml/100 kg) of cement for most work. As the quantity is increased, the acceleration of setting time and strengths are increased.

CLEAN-UP

Clean tools and equipment with water before concrete hardens.

PRECAUTIONS/LIMITATIONS

- Do not dispense directly onto dry cement.
- Keep concrete from freezing until a minimum of 1000 psi (7 MPa) is achieved.
- ACCELGUARD 90 will freeze at temperatures of approximately -15°F (-26°C). Freezing and thawing will not harm the material if thoroughly agitated.
- In all cases, consult the Material Safety Data Sheet before use.

WARRANTY: The Euclid Chemical Company ("Euclid") solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Euclid, no other representations or statements made by Euclid or its representatives, in writing or orally, shall alter this warranty. EUCLID MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Euclid product fails to conform with this warranty, Euclid will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Euclid does not authorize anyone on its behalf to make any written or oral statements which in any way alter Euclid's installation information or instructions in its product literature or on its packaging labels. Any installation of Euclid products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Euclid's products for the Buyer's intended purposes.