

A-80C

NON-CHLORIDE ACCELERATING ADMIXTURE FOR CONCRETE

PRODUCT DESCRIPTION: Specco A-80C is a non-chloride, accelerating, water-reducing admixture designed to aid the placement of concrete in cold or sub-freezing temperatures. A-80C allows increased early and final strength gains formation, and can be used over a wide range of temperatures by varying the dosage. Specco A-80C can be used to accelerate ready mix, mobile mix, block, precast and prestressed concrete, mortars, and grouts.

BENEFITS: CONTROLLED ACCELERATION (DEPENDING ON DOSAGE)...ALLOWS EARLIER FINISHING AND FORM REMOVAL...IMPROVED WORKABILITY...DECREASED BLEEDING & SEGREGATION... REDUCED HEAT PROTECTION...PROVIDES DENSER CONCRETE.

COMPOSITION: Modified nitrate-based solution. A-80C does not contain any calcium chloride or intentionally added chlorides that would initiate or promote corrosion of reinforcement steel, or contribute to efflorescence.

PHYSICAL PROPERTIES at 70° F (21°C):	APPROXIMATE VALUES:
Weight per gallon:	12.10 +/- 0.1 lb./ gallon
pH:	8.0 +/- 0.5
Color:	Clear light brown liquid
Viscosity-Brookfield:	20 cps

TECHNICAL DATA: Specco A-80C Accelerator is formulated to comply with ASTM C-494 Type C and E guidelines. Specco A-80C is typically dosed at 16-32 oz. per 100 lbs. of cement (1040-2080ml/100 kg) for most applications. The dosage can be increased as needed to accelerate the setting time and both early and ultimate strength gain. Specco recommends a field test or trial mix be run in order to determine the optimum dosage needed for set time and rate of strength gain requirements. The dosage will vary with jobsite temperature, air movement, concrete temperature and mass, mix design components or other admixtures, as well as heat, insulation, or wind-break protective measures used.

COLD WEATHER PERFORMANCE CHARACTERISTICS RUN @ 40°F (8° C) AMBIENT TEMPERATURE:

MIX DATA:	A-80C DOSAGE:
Dosage, fl oz./cwt (ml/100 kg)	16, 32, 64, 90 (1040, 2080, 3900, 5850)
Cement, Type I lb/yd ³ (kg/m ³)	500 (296)
Flow in (mm) – 5 drops	6 (153 +/- 5)
Air Content %	Non-Air Entrained

SETTING TIME VERSUS DOSAGE RATE:

MIX:	INITIAL SET (Hr. / Min.)	DIFFERENCE FROM CONTROL
Plain (Control)	4:40	-
Specco A-80C @ 16 oz/cwt (1040 ml/100 kg)	2:40	-2:00
Specco A-80C @ 32 oz/cwt (2080 ml/100 kg)	2:11	-2.29
Specco A-80C @ 64 oz/cwt (3900 ml/100 kg)	2:00	-2.40

STRENGTH GAIN VERSUS CONTROL @ 40° F (8° C):

Compressive Strength psi (mPa)	Plain (Control)	A-80C @ 32 oz/cwt (2080 ml/100kg)
1 DAY	490 (3.4)	1225 (8.5)
3 DAYS	1050 (7.3)	1775 (12.3)
7 DAYS	2050 (14.2)	3200 (22.2)
28 DAYS	3250 (22.5)	4270 (29.6)

DIRECTIONS FOR USE: Specco A-80C Accelerator should be added to the batch water and aggregates, never directly to the dry cement. A-80C contains a high range water reducer that reduces water requirements approximately 5 to 12% depending on the dosage used. Specco A-80C is compatible with most other admixtures however they should always be added separately into the mix. For temperatures 32° F to 60° F (0° to 16° C), add A-80C to the concrete at the rate of 16-32 oz. per 100 lbs. of cement (1040-2080ml/100 kg) depending on the rate of acceleration and strength gain required. For use in concrete block production in temperature ranges of 32 to 60° F (0° to 16° C), add Specco A-80C at a reduced rate of 6-12 oz. per 100 lbs. of cement (390-780ml/100 kg.).

For temperatures below 32° F (0° C) use warm water and heated aggregates to keep the concrete temperature above 60° F (16° C) if possible. Refer to ACI 306.1 report "Standard Specification for Cold Weather Concreting" for recommended protection methods of concrete placement in sub-freezing temperatures. For warmer temperatures above 60° F (16° C), the dosage can be reduced as needed.

CAUTIONS: Specco A-80C will freeze at approx. -15° F (-26° C), but may be completely restored by thawing above 32° F (0° C) and thoroughly mechanically agitating before use. Do not use pressurized air for mixing or agitation. Specco A-80C should be stirred before using if the material has set for an extended period (3-6 months).

WARNINGS: Avoid contact with skin and eyes. Wear protective clothing and safety glasses during application. Keep away from food and drink. Do not take internally. Refer to product M.S.D.S. (Material Safety Data Sheet) for further health and safety information. FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.

H.M.I.S. CODES: HEALTH = 1, FLAMMABILITY= 0, REACTIVITY = 0, PERSONAL PROTECTION = C (GLOVES, GOGGLES, APRON)

SHIPPING NAME: Concrete Admixture – Water base - Not regulated

SHIPPING CLASS: ITEM 33880, SUB 2, LTL 55

STORAGE: Ideal storage is between 60° to 80° F. Keep from freezing.

PACKAGING: 5 gallon (18.9 L) pails, 55 gallon (208 L) drums, 265 gallon (1000 L) containers.

SHELF LIFE: 1 year stored properly. Depending on storage conditions, the shelf life may be extended.

LIMITED WARRANTY: This product is warranted to be of merchantable quality when used according to the instruction herein. It is not warranted to be suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of the product as purchased, if found to be defective upon inspection by the manufacturer. This limited warranty is issued and accepted in lieu of all other expressed warranties and explicitly excludes liability for consequential damages. Buyer assumes all risk and liability resulting from the use of this product.

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