

CA-EX2L

CHEMICAL LIQUID EXTENDER/ACCELERATOR

DESCRIPTION

CA-EX2L is a high-activity liquid silicate material which is normally compatible with API Class A, B, C, G, and H cements.

APPLICATION

CA-EX2L functions as a cement extender by reacting with lime or Calcium Chloride to form a silicate gel. This reaction allows larger quantities of mix water without excessive free-water separation. CA-EX2L produces a lower density and a higher slurry yield allowing cement to be mixed from 11.4 to 15.0 ppg. In addition, CA-EX2L accelerates strength development of the cement.

RECOMMENDED TREATMENT

Recommendations for treatment should be made only after a thorough study has been made of all the factors affecting the application.

CA-EX2L is normally added to sea water for cement make-up at concentrations of 12 to 68 gal per 100 sacks of cement. CA-EX2L will not form a silicate gel in fresh water unless calcium is added in the form of calcium chloride. CA-EX2L can be added to sea water pretreated with 3 lb Calcium Chloride per bbl of water.

LIMITATIONS

CA-EX2L in concentrations above 42 gal per 100 sacks of cement must be mixed with Calcium Chloride for greater extension due to insufficient lime in the cement for reaction. Calcium Chloride additions should never exceed the amount of CA-EX2L slurries.

Cement additives are less effective in CA-EX2L slurries.

PACKAGING

CA-EX2L is normally available in export quality 55 gal drums. Special packaging is available upon request and at extra cost.



SAFETY AND HANDLING

SODIUM SILICATE is an alkaline material. Avoid contact with eyes or skin. Contact with skin could cause severe burns. Eye contact could result in permanent loss of vision. Chemical goggles and resistant gloves must be utilized while handling CA-EX2L. In case of contact, immediately flush skin or eyes with copious amounts of fresh water and seek medical attention.

TYPICAL LABORATORY DATA

TABLE 1
THICKENING TIME AND COMPRESSIVE STRENGTH
(API CLASS G CEMENT)

SLURRY		CA-EX2L (GAL/100 SK)	THICKENING TIME (70 Bc @ BHCT)		COMPRESSIVE STRENGTH (24 HR @ BHST)	
DENSITY (LB/CU FT)	YIELD (CU FT/SK)		45° C	75° C	60° C	95° C
11.4	2.98		60	+6 HRS	+4 HRS	260
12.5	2.18	42	4:15	2:45	810	875
13.6	1.70	30	2:56	1:52	1380	1420
14.2	1.51	20	2:28	1:34	2200	2600
15.0	1.30	12	1:47	--	2650	2830

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