



P-FLE

CEMENTING SERVICE BULLETIN

06/03/91

P-FLE (PETROCHEM - FLUID-LOSS ADDITIVE FOR EXTENDED SYSTEMS)

TECHNICAL DATA

P-FLE is a fluid-loss additive designed for use in low-density slurries. These slurries are obtained using special lightweight cements or cement extenders. Due to the added mix water in the extended cement system high Fluid-Loss values are experienced compared to conventional slurries, which results in reduced cement fill up and increased hydrostatic pressure. Conventional fluid loss additives were found to be impractical due to the large amount of product needed to obtain control. However, P-FLE is an effective fluid-loss additive since very small quantities are required to obtain excellent values in the range of 50 to 200 ml/30 min.

P-FLE is used up to 200 deg. F. At concentrations from 0.4 To 3.5% Bwoc. When used with fresh water cement systems either P-DIS or P-DISL (Petrochem-Dispersant powder or Liquid) is required to disperse the slurry and to aid low fluid-loss values. However, sea water cement systems up to 13.5 Ppg. Do not require any P-DIS or P-DISL (Dispersant) since the sea water acts as a dispersant.

P-FLE increases the viscosity of the slurry limiting the slurry densities to a maximum of 14.5 Ppg. Mixing difficulties can be expected if higher slurries are attempted.

P-FLE has a retarding effect whereby retarders will not be required at BHCT of less than 125 deg. F. However, the high early compressive strength will be retarded, but the ultimate strength development will not be affected. Faster strength development occurs with P-FLE than with other powdered fluid loss additives.

PROPERTIES

<u>PRODUCT</u>	<u>FORM</u>	<u>SP. GR.</u>	<u>PACKAGING</u>
P-FLE	Tan Powder	1.15	50 Lbs. /Sack.

SAFETY

Chemical goggles is recommended while handling P-FLE since the product becomes slippery when wet and eye contact could be irritating. If the product gets in the eyes wash eyes for 15 miss. If irritation persists, get medical attention. If the skin is contacted - wash thoroughly with water. If inhaled move to fresh air.



CLASS H CEMENT + P-FLE & P-EBA

DENSITY: 13.3 PPG
99.17 PCF

W.R.: 9.96 GPS
YIELD: 1.86 CU FT/SK

THICKENING TIME UNDER A. P. I. CONDITIONS

% ADDITIVE	8000 FT 130 ⁰ F
0.6	2:10

**COMPRESSIVE STRENGTH
P. S. 1. (24 HOURS)**

% ADDITIVE	160 ⁰ F
0.6	1100 PSI