



# P-D88L

## **CEMENTING SERVICE BULLETIN**

05/27/88

### P-D88L (PETROCHEM - DISPERSANT & ANTI-GELLING LIQUID)

#### TECHNICAL DATA

**P-D88L** is liquid cement dispersant and anti-gelling liquid which is readily dispersible in water to provide uniform distribution throughout the cement slurry.

The normal range of use for P-D88L is 0.03 to 0.33 Gals. /Sack of cement. The total fluid per sack of cement is to be reduced by the volume of P-D88L added to the mix water.

P-D88L can be used from low to high density slurries, and with fresh water to saturated salt water up to 325<sup>0</sup>F, whereas regular dispersants only work up to about 200<sup>0</sup>F. P-D88L will also complement the performance of most fluid loss additives. However, P-D88L must not be mixed with any other liquid additives in it's concentrated form since a precipitate may form. Therefore, disperse each product in water one at a time.

P-D88L is the liquid form of P-D88 (which is a powdered product for dry blending with cement) however; both products perform the same function.

#### PROPERTIES

<u>PRODUCT</u>	<u>FORM</u>	<u>SP. GR.</u>	<u>PACKAGING</u>
P-D88L	Brown Liquid	1.23	55 gal/Dr.

#### SAFETY:

Chemical goggles are recommended while handling P-D88L as eye contact will result in irritation and could cause some injury to the eye. If P-D88L gets in the eyes wash eyes for 15 mins. And get medical attention. Resistant gloves are to be worn as skin contact is irritating and may cause a mild burn depending on the period of exposure. Contaminated clothing is to be removed. Read the MSDS data sheet before use.

## DISCUSSION

Slurries in oil well cementing are generally mixed with an excess of water than is necessary for actual hydration of the cement as excess water facilitates good pumpability. A new dimension has been created in oil well cementing with the introduction of dispersants whose action reduces internal slurry friction and increasing pumpability, thus making it possible to reduce water requirement.

High-density water reduced slurries with weights of 18.0 pounds per gallon with class 'H'; 17.5 pounds per gallon with class 'G' and 17.0 pounds per gallon with class 'A' are attainable. Regular field equipment can be used to prepare water-reduced slurries using class C, G, or H cements. If it is necessary, P-D88L or P-D88 (whichever is more convenient) can be added.

## ADVANTAGES

The preliminary advantage of water-reduced slurries is that they develop higher compressive strength at low temperatures in shorter time thus reducing WOC time. The fluid loss is reduced by a reduction in water requirement and the set cement is also denser resulting in less permeability. Water reduced slurries are less susceptible to well contamination and they also eliminate the need for weighting agents in wells with high bottom hole pressures.

One of the leading uses of water-reduced slurries is in the setting of cement plugs. Such slurries are particularly important in setting plugs for whip stocking. Because of the very hard dense plug that is achieved using water-reduced slurries, drillers are able to deviate holes in new directions.

## FLUID LOSS

Conventional slurries have a significantly higher fluid loss than high-density slurries.

## THICKENING TIME

Thickening times of water-reduced slurries are different to normal API water content slurries without P-D88L. All slurries should be tested in a laboratory before field application.