



# **P-HTR** **CEMENTING SERVICE BULLETIN**

09/06/12

## **P-HTR (PETROCHEM - HIGH TEMPERATURE RETARDER)**

### **TECHNICAL DATA**

P-HTR is a powdered high temperature retarder for use in cement slurries from 220<sup>0</sup>F. to 400<sup>0</sup>F. P-HTR also provides a slight dispersing action in cement slurries thus aiding turbulent flow techniques. This retarder is very economical in that very low concentrations are required.

P-HTR can be dry blended or readily dispersed in the mix-water to provide uniform distribution throughout the cement slurry. The normal range of use for P-HTR is 0.05% To 1.0% BWOC. The liquid version P-HTRL is normally used at a concentration of 0.1 gal/sk which provides the same activity as 0.25 % P-HTR BWOC.

P-HTR is compatible with all API classes of cement although the concentration for a certain thickening time at a given depth and temperature may vary with the brand of cement. Therefore, laboratory tests with the actual cement, additives and location mix water should be tested prior to the cement job.

P-HTR has a slight tendency to foam the cement systems of which can be easily controlled by using P-DFL or P-AFA (Petrochem - Antifoam Agents – liquid and powdered).

### **PROPERTIES**

<b><u>PRODUCT</u></b>	<b><u>FORM</u></b>	<b><u>SP.GR.</u></b>	<b><u>PACKAGING</u></b>
P-HTR	Brown Powder	1.30	50 Lb/sack.
P-HTRL	Brown Liquid	1.11	55 Gal/Dr.

### **SAFETY**

Chemical goggles and dust masks are recommended while handling P-HTR/P-HTRL. Eye contact will result in irritation and could cause some injury to the eye, if P-HTR/P-HTRL gets in the eyes wash eyes with fresh water for 15 minutes. And get medical attention. Resistant gloves are to be worn, if skin is contacted wash with soap and water. Inhalation: no systemic injury is expected.



**CLASS H CEMENT + P-HTR**

**DENSITY:** 16.5 PPG  
123.43 PCF

**W. R. :** 5.28 GPS  
1.385CUFT/SK

**THICKENING TIME UNDER A.P.I. CONDITIONS**

	10,000 ft	12,000 ft	14,000 ft
% ADDITIVE	197°F	230°F	250°F
0.4	4:00	3:00	2:25

**COMPRESSIVE STRENGTH**

P. S. 1. (24 HOURS)

% ADDITIVE	230 °F	260 °F	280 °F
0.4	3,500	4,100	4,750