

P-SPG

CEMENTING SERVICE BULLETIN

2/01/20

P-SPG (PETROCHEM – SQUEEZE, PTA & GAS CONTROL)

TECHNICAL DATA

P-SPG is a pre-blended powdered additive for use in a Squeeze, PTA or Gas Control cementing application. **P-SPG** contains a proprietary blend of powdered (Fluid-Loss, Dispersant, Anti-Foam, Expanding & Strength) additives for use in low to medium temperature cement slurries <200°F - that can be mixed with either fresh or sea water.

P-SPG can either be pre-dissolved in the mix water or dry blended in the cement. A typical cement slurry using **P-SPG** mixed with any API cement at a concentration of 45 lbs. (1x5 Gal. Pail) per 2,000 lbs. (Super Sack) of cement.

At a mix water of 4.29 GPS the cement weight will be $^{\sim}16.2$ ppg and a cement slurry yield of 1.09 cuft/sk. At $^{\sim}150^{0}$ F the slurry should provide a fluid-loss of $^{\sim}150-200$ ml/30 minutes.

P-SPG is compatible with all API classes of cement together with other cement additives including silica flour, slag and fly ash. A guide for Thickening Times and Compressive Strengths is provided below.

PROPERTIES

P-SPG - DRY BULK VOLUME = 4 .4 GALLONS / 45 LBS.

PRODUCT	FORM	SP.GR.	PACKAGING
P-SPG	TAN POWDER	2.39	5 GAL. PAILS
P-SRL	BROWN LIQUID	1.13	5 GAL. PAILS

MIXING PROCEDURE

- Fill a clean mixing tank with 92 gallons of fresh water and begin mixing.
- Slowly add the required P-SRL (Synthetic Retarder Liquid) and continue mixing.
- Slowly add 45 lbs. (5 Gal. Pail) of P-SPG and continue mixing until fully dispersed.
- Slowly add 2,000 lbs. (21.28 sacks) of Class "H" cement while vigorously mixing for a homogenous slurry blend.
- Add **P-DFL** (De-Foamer Liquid) and/or **P-SRL** as required.
- Slurry yield = 1.09 CUFT/SK or 4.15 Barrels of slurry/2,000 lbs. (21.28 x 94 LB SKS of cement).
- Total slurry yield of mixture = 23.20 CUFT.
- Slurry density: 16.2 ppg
- Water requirements are 38% BWOC (4.3 GPS) of class "H" cement or 92 gallons/2,000 lbs. of cement.

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P-SRL (*SYNTHETIC RETARDER LIQUID) GUIDE FOR USE UP TO 300°F

TEMPERATURE (°F)	RETARDER GUIDE (OZ)	THICKENING TIME	COMPRESSIVE STRENGTH (HRS.)		
			PRIMARY SET	600 PSI	2100 PSI
90-115	NONE	3:30-4:00	8 hr.	16 hr.	24 hr.
115-130	22	3:30-4:00	6 hr.	12 hr.	24 hr.
130-145	37	3:30-4:00	10 hr.	12 hr.	24 hr.
145-160	52	3:30-4:00	9 hr.	11 hr.	24 hr.
160-175	67	3:30-4:00	8 hr.	12 hr.	24 hr.
175-220	154	3:30-4:00	11 hr.	13 hr.	24 hr.

^{*} TDS GUIDE – API REQUIRES LABORATORY CONFIRMATION TESTING.

SAFETY

Please refer to the respective SDS.

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