



# GROUT-WELL<sup>®</sup> AND GROUT-WELL<sup>®</sup> DF



GROUT-WELL<sup>®</sup> and GROUT-WELL<sup>®</sup> DF are one step bentonite grouting materials designed to achieve low permeability seals in water wells, monitor wells, geotechnical borings, and heat pump holes. They achieve a range of solids contents, 17% to 20% solids by weight. GROUT-WELL<sup>®</sup> DF's granular nature **reduces dusty conditions** during mixing operations.

Placement of the GROUT-WELL<sup>®</sup> products is best done using a positive displacement or progressive cavity pump. When pumping must be done with gear or diaphragm pumps, you may have to use additional make-up water to insure pumpability due to the limited pressure generated by these types of pumps.

When adding the grouts to make-up water, the slurry will resemble "pancake batter", a creamy consistency with lumps. This is the ideal time to pump the fluid since all the bentonite has not fully hydrated. Once in place, the particles continue to swell, sealing off cracks and crevices while gelling to form its caulk-like consistency.

Provided local regulations allow, it is always recommended that the tremie line be withdrawn as the grout is being pumped. This permits the grout to continue its "set" undisturbed, reduces pump pressure, and minimizes unnecessary migration into surrounding formations.

## MATERIAL SPECIFICATIONS:

Permeability:  $1 \times 10^{-8}$  cm/sec  
Slurry Density: 9.4 – 9.5 lbs/gal  
pH Range: 8.0 – 10.0  
Dry Bulk Density: 55 - 60 lbs/cu ft  
Thermal Conductivity: .42 BTU/hr-ft-degree F

	17.7% Solids	20.0% Solids
Grout-Well <sup>®</sup> DF	50 lbs	50 lbs
Water	28 gal	24 gal
Usable Slurry	31 gal	27 gal

TYPICAL E.P. TOXICITY ANALYSIS		
	Standard (ppm)	Set Grout (ppm)
Arsenic	5.0	<0.10
Barium	100.0	0.50
Cadmium	1.0	<0.05
Chromium	5.0	<0.10
Lead	5.0	<0.10
Mercury	0.2	<0.02
Selenium	1.0	<0.05
Silver	5.0	<0.10

TYPICAL CHEMICAL ANALYSIS %			
SiO <sub>2</sub>	63.54	MgO	1.67
Al <sub>2</sub> O <sub>3</sub>	19.28	CaO <sub>3</sub>	0.38
Fe <sub>2</sub> O <sub>3</sub>	3.48	TiO <sub>2</sub>	0.22
K <sub>2</sub> O	0.10	Na <sub>2</sub> O	2.34
MnO	0.02	H <sub>2</sub> O	4.50
L.O.I. *	4.37		
*Loss on Ignition			

**GROUT-WELL<sup>®</sup> and GROUT-WELL<sup>®</sup> DF are packaged in 50 pound bags.**