

ChemGrout®

"Equipment for Grouting Since 1969"

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Material Testing Results

Date: May 31, 2007

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Manufacturer: Unisorb
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Material: Unisorb WTF (Wind Turbine Formula) **Lot #** 088031H

Material Application: Wind Turbine Foundation High Strength Grout

Mfg. Plant: Fairiss, PA **Std. Bag Weight:** 50 lbs. #

Testing Conditions: Outside Temperature: 78°F Humidity: 68%

Equipment Used: Model: CG570 Pump: 2TJ6 Progressing Cavity
Mixer: Paddle Power: Hydraulic

Std. Mix Ratios: 3.25 qts. per 50 lb bag **Water Temp:** 68 °F

Batching Method: Quantity Material: 200 lbs. Quantity Water: 27 lbs

Mixing Time: 120 Seconds **Batch Temp:** 80.5 °F

Specific Gravity: SG = 2.28 **Flow Cone** n/a Seconds

Pumping Method: Recirculated through hose, recorded pressures at various flow rates.

Flow Rate/Pressure:	Flow Rate	Pressure	Flow Rate	Pressure
Hose (1 1/4" x 50')	6.3 GPM	24 PSI	GPM	PSI
Hose ()	8.2 GPM	37 PSI	GPM	PSI
Hose ()	10.3 GPM	49 PSI	GPM	PSI
Hose ()	11.9 GPM	55 PSI	GPM	PSI
Hose ()	13.9 GPM	62 PSI	GPM	PSI
Hose ()	16.6 GPM	68 PSI	GPM	PSI
Hose ()	18.5 GPM	71 PSI	GPM	PSI
Hose ()	21.5 GPM	80 PSI	GPM	PSI
Hose ()	24.3 GPM	89 PSI	GPM	PSI
Hose ()	26.7 GPM	91 PSI	GPM	PSI

Observations: Mixed easy, meduim pumping pressures, clean out with minimal seperation max hose length 150 feet

Results: ChemGrout, Inc. rates the pumpability of this product as a "7" out of 10, with 10 being the easiest. We recommend the CGC4 or 030 pump or higher.