

Material Testing Results

"Equipment for Grouting Since 1969"

805 E. 31st Street, P.O. Box 1140 **Date**: 8/17/2000

LaGrange Park, Illinois 60526 E-Mail: info@chemgrout.com

Manufacturer: Lyons Mfg, Inc. Contact: Robert

8900 Forney Rd **Phone:** 214-381-8100 Dallas, TX 75227-8158 **Fax:** 214-381-8100

Material: Flow Rock Lot # N/A

Material Application: anchoring cement--non shrink grout

Mfg. Plant: Dallas, TX Std. Bag Weight: 50 #

Testing Conditions: Outside Temperature: 75.7*F Humidity: 58%

Equipment Used: Model: CG570 Pump: 2TJ6 Progressing Cavity

Mixer: Paddle Power: Hydraulic

Std. Mix Ratios: 5 qts/bag Water Temp: 76.4 *F

Batching Method: Quantity Material: 150 lbs. Quantity Water: 31.3 lbs

Mixing Time: 30-40 Seconds Batch Temp: 77.8 *F

Specific Gravity: SG = 2.09 **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')	2.8 GPM	PSI	GPM	PSI
Hose (1 1/4" X 50')	4.73 GPM	PSI	GPM	PSI
Hose (1 1/4" X 50')	7.26 GPM	PSI	GPM	PSI
Hose (1 1/4" X 50')	9.94 GPM	PSI	GPM	PSI
Hose (1 1/4" X 50')	12.26 GPM	PSI	GPM	PSI
Hose (1 1/4" X 50')	14.51 GPM	PSI	GPM	PSI
Hose (1 1/4" X 50')	16.61 GPM	PSI	GPM	PSI
Hose (1 1/4" X 50')	19.24 GPM	PSI	GPM	PSI
Hose (1 1/4" X 50')	21.5 GPM	PSI	GPM	PSI
Hose (1 1/4" X 50')	24.03 GPM	PSI	GPM	PSI

Observations: Fast setting--17 minute initial set--mixed & pumped very easy

Low HP required

Max hose length: 200+ ft

Results: ChemGrout, Inc. rates the pumpability of this product as a "8" out of 10, with

10 being the easiest. ChemGrout, Inc. recommends the 2C4 pump or higher.