

# Master Squeeze Mix®

## High Fluid Loss / High Solids Slurry Lost Circulation Plug



### Product Description

- Microionized, surface modified, cellulose derivative
- Elongated, fibrous, solid particles which range in size from a few microns up to fibers with a length of 1 mm or more
- Liquid dispersable (both water and non-aqueous) cellulose fiber
- Specific gravity 1.54
- Bulk density (lb/cu ft): compacted- 29, uncompacted- 15
- Moisture % - 5 to 10
- pH, 10% in water 5 to 6
- Particle size - 95% wet washes thru 100 mesh screen

### Function

- High fluid loss, high solids slurry with unique performance compared to other types of LCM. When placed in and/or across a loss zone, the liquid phase is squeezed from the slurry, leaving a solid plug behind.
- Designed to be squeezed into the thief zone forming a solid plug reducing wellbore stress
- Differs from other types of lost circulation materials, in that it rapidly forms a solid plug within the loss zone rather than remaining at or near the face of the wellbore.



### Benefits

- Cures complete loss circulation
- Replaces costly cement squeezes
- Can be cleaned up through acid treatment
- Can be used in water-based, oil-based and synthetic-based muds
- No additional LCMs need to be added
- Prevents side-tracking of the wellbore
- Economical

### Mixing Recommendations

- A 100 bbl slurry should be pumped at thief zone. Fill backside with water. Close BOPs and begin applying soft squeeze at 50 psi up to 250 psi and hold for 4 to 6 hours (See mixing chart below).
- A fluid technician is available 24 hours-a-day to assist in specific recommendations based on actual hole conditions.
- There are two key factors to obtaining a successful Master Squeeze Mix®: First, a slurry with an extremely high solids content and high fluid loss must be prepared. Second, the slurry must be placed at the proper location in the wellbore.

### Slurry Formulation for Fresh or Sea Water Formula for preparing one barrel

Density lb/gal (1080 kg/m <sup>3</sup> )	MASTER SQUEEZE MIX™ lb      sacks (22.7    kg)		Barite* sacks	Water** bbl (.15m <sup>3</sup> )
9	60	2.4	0.0	0.93
10	60	2.4	0.0	0.89
11	58	2.3	1.2	0.86
12	50	2.0	1.8	0.82
13	48	1.9	2.3	0.79
14	43	1.7	2.9	0.76
15	38	1.5	3.5	0.72
16	35	1.4	4.0	0.69
17	30	1.2	4.6	0.66
18	28	1.1	5.2	0.62
19	23	0.9	5.8	0.59

\*If saturated saltwater is used, barite must be decreased by 0.6 sacks per barrel.

### Slurry Formulation for Oil or Synthetic Formula for preparing one barrel

Density lb/gal (1080 kg/m <sup>3</sup> )	MASTER SQUEEZE MIX™ lb      sacks (22.7    kg)		Barite* sacks	Oil/Syn** bbl (.15m <sup>3</sup> )
8	55	2.5	0.38	0.880
9	50	2.0	0.88	0.855
10	48	1.9	1.38	0.830
11	43	1.7	1.88	0.805
12	40	1.6	2.38	0.770
13	38	1.5	2.90	0.745
14	33	1.3	3.43	0.720
15	30	1.2	3.97	0.695
16	28	1.1	4.52	0.670
17	25	1.0	5.08	0.645
18	20	0.8	5.65	0.610

\*Due to variations in oil or synthetic & barite, pilot tests should be made to determine exact formulations. If slurry becomes too thick, add up to 1 lb/bbl wetting agent to thin.

See Mud Masters Group MASTER SQUEEZE MIX® General Procedures sheet for additional mixing guidelines.



**Mud Masters Group**  
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See SDS for more product information.  
24 hours: 1 (800) 395-9332 | [www.mudmastersgroup.com](http://www.mudmastersgroup.com)