

### Product Summary

EZ Squeeze® is a high fluid loss, high solids squeeze material. A solid plug is formed within the loss zone when the liquid phase is squeezed from the slurry, rather than remaining at or near the face of the wellbore (common with finer particle squeeze material). The wide particle size range of EZ Squeeze® minimizes the possibility of the resulting hard plug being removed during drilling operations, eliminating repeated remedial treatments in the same zone.

### Physical Properties:

Appearance: Off White/Gray Powder

Specific Gravity (g/mL.): (1.84)

Odor: Slight

pH in 1% solution: 11.5-12.5

### Recommended Treatment

Turbo-Chem recommends using EZ Squeeze® to remediate partial to massive losses in the open hole and/or sealing perforations in cased hole. Mixing and pumping procedures will be provided by Turbo-Chem using well data at the time of losses.

### EZ Squeeze® PSD

U.S. Mesh Screen (Micron)	Product Retained, g
6 (3400µ)	4.0
8 (2360µ)	7.0
10 (2000µ)	6.2
14 (1400µ)	13.5
18 (1000µ)	8.0
35 (500µ)	10.1
60 (250µ)	40.4
100 (150µ)	7.1
120 (125µ)	2.2

### Wellbore Stability Benefits:

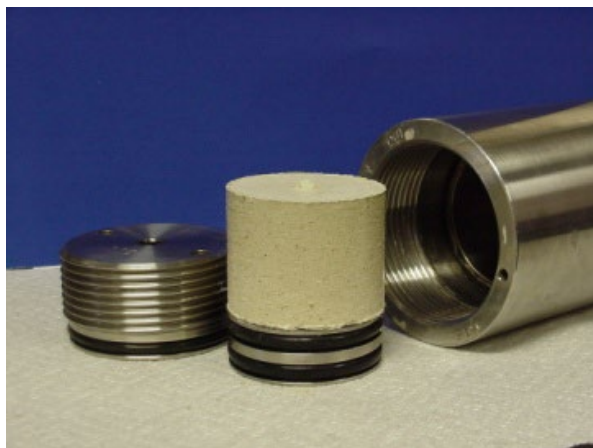
- Can be utilized as a Pre-Cement application to avoid multiple failed cement operations.
- Can be pumped through down hole tools up to 100 ppb.
- Eliminates the risk of sidetracking (which can occur with cementing)
- Effective at both low and high wellbore temperatures.
- Easily mixed through the hopper.
- Compatible mixing in all drilling fluids.
- Less costly alternative to pumping multiple LCM pills and/or cement.
- Tailored particle size range optimizes sealing capabilities of multi-sized fractures and reduces effective response time to whole mud losses.

### Handling and Storage

Proper PPE should be worn while handling this product. Minimize dust exposure. Please review SDS before using.

### Packaging

EZ Squeeze® is available in 25 lb. sacks, 50 sacks/pallet.



# EZ Squeeze®

High Fluid Loss, Extensive Particle Size Lost Circulation Squeeze Blend

## Mixing Requirements

- Empty isolated mixing tank is ideal.
- EZ Squeeze® can be pre-mixed at any time. If no barite is added, the EZ Squeeze® slurry can stay in solution (as long as its hydrated) for weeks before pumping. Low shear mixing for 15-30 minutes per day is recommended.
- Patience, time and correct placement of the slurry are necessary for a successful EZ Squeeze® job.
- If a slurry has been weighted by accident, add additional EZ Squeeze® to prevent future barite settling.
- Ideally, enough EZ Squeeze® should be mixed to cover all potential loss zones and enough excess slurry to execute a hesitation

## EZ Squeeze® Slurry Mixing Chart

Density (freshwater)	Lbs./bbl.	Sacks/bbl.	Barite Sacks	Water/bbl.
9.0	100	4	0	.77
10.0	100	4	0.6	.75
11.0	94	3.8	1.2	.70
12.0	84	3.3	1.8	.67
13.0	78	3.2	2.3	.65
14.0	70	2.8	2.9	.63
15.0	62	2.5	3.5	.60
16.0	56	2.3	4.0	.58
17.0	50	2.0	4.6	.56
18.0	44	1.8	5.2	.53
19.0	34	1.3	5.8	.51

## 9.0 ppg EZ Squeeze® Bullhead Pumping Procedure

1. Clean mixing pit and lines thoroughly leaving no residual mud in the pit or the lines.
2. Add 77 bbls of freshwater, 4 pails of Turbo-Defoamer and 12 pails of EZ Thin to the mixing pit.
3. Add 400 sacks of EZ Squeeze® to the mixing pit and allow agitation until homogenous.
4. Add Barite, if needed, to achieve desired slurry weight.
5. With the bit @ a depth which all of the slurry can exit the bit and 20 bbls of EZ Squeeze® are in the formation, pump the 100 bbls of E Z Squeeze® slurry to the drill pipe with rig pumps at 3-5 bpm to the bit.
6. As the EZ-Squeeze® reaches the bit begin bull heading the slurry out of the bit until all of the 20 bbls of EZ Squeeze® are in the formation of concern. If at any time a significant increase in pressure is achieved prior to bull heading the recommended volumes into the formation of concern, discontinue pumping, open hydril and pump the remaining EZ Squeeze® slurry as a balanced pill, POOH to above the slurry inside casing and circulate an additional 10 bbls of system mud to ensure the DP and BHA are clear of any remaining slurry. TCI never recommends leaving slurry inside the DP w/ a bit w/ jets or any tools. Shut down for 1 hour and monitor well.
7. Prior to beginning hesitations, check fluid level on backside, if any fluid should be required to fill, obtain accurate fluid volumes required to fill to know the exact location and volume of slurry remaining. Begin hesitations by pumping 5 bbls @ ½ to 1 bpm, every 30 - 45 minutes, until desired pressure is achieved. If no pressure is obtained upon squeezing half of the remaining EZ Squeeze® volume (50 bbls) into the formation, discontinue pumping and wait one hour. Resume hesitations by pumping 3 bbls @ ¼ - ¾ bpm until desired pressure is achieved or the tail end of the EZ Squeeze® slurry is 3 bbls above the zone of concern, begin 4 hour wait.