

CIRCULITE™ CS-FEATHERWEIGHT LIGHTWEIGHT CEMENT

The CircuLite family of lightweight cements delivers high compressive strength at lower densities to avoid lost circulation and deliver excellent zonal isolation. Our CS-featherweight blend is the lightest of the three available CircuLite blends. This enables you to cement higher in the wellbore without causing the excessive downhole stresses – and resulting formation damage – that higher-density cements can cause. The fast-setting blend protects well integrity by transitioning quickly between slurry and solid states, which helps to prevent damaging gas influx.

SPECIFICATIONS

Density	9 lb/gal
Yield	3.87 ft ³ /sk
Water Requirement	16.06 gal/sk
Free Fluid @ 158°F and 90° Incline	0 ml/250 ml
Fluid Loss	188 ml/30 min

RHEOLOGIES (cP)

(RPM)	80°F	180°F
300	116	107
200	90	81
100	60	52
60	47	39
30	38	27
6	25	14
3	20	12

THICKENING TIME

Temperature (°F)	Consistency (Bc)	Time (hr:min)
158	70	5:25

COMPRESSIVE STRENGTH

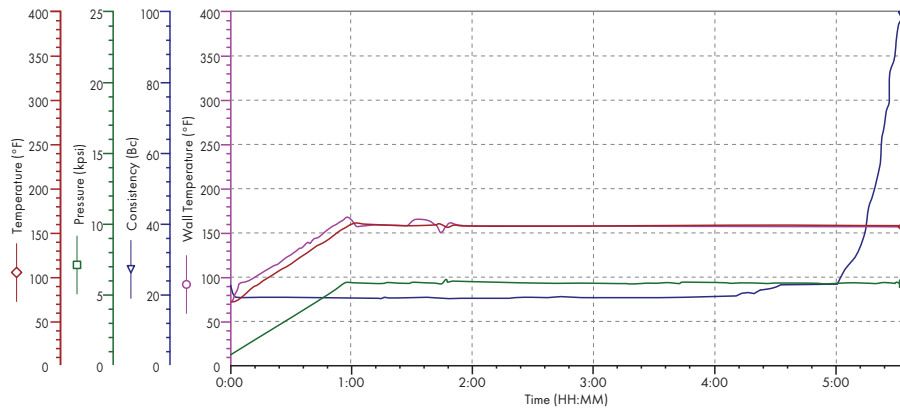
Time (hr)	Temperature (°F)	Strength (psi)
24	158	644
48	158	757

CircuLite CS-featherweight lightweight cement accommodates a wide range of wellbore conditions and operational requirements:

- Performs with exceptional reliability in low-pressure, high-porosity zones
- Withstands perforation and hydraulic-fracturing pressures to provide production-quality cement across pay zones
- Can be enhanced with additives to prevent gas migration or further inhibit lost circulation

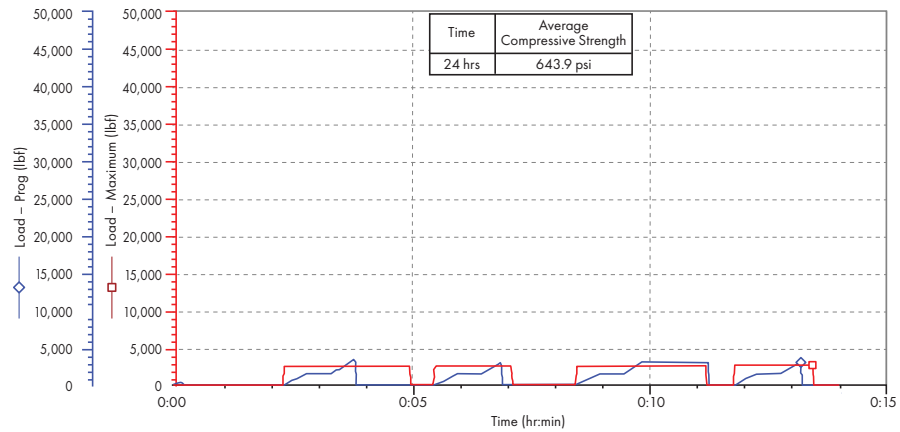
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TOTAL-THICKENING-TIME ATTRIBUTES



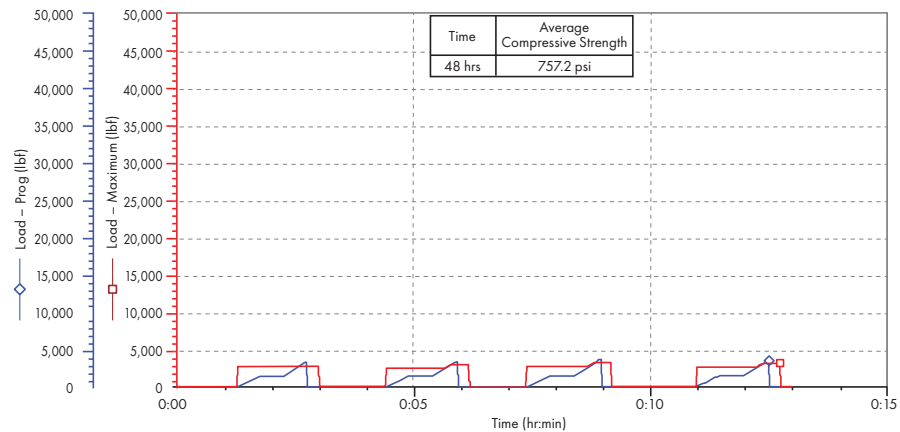
CircuLite CS-featherweight cement slurry can be customized to deliver high performance between 80-160°F and ranging in density from 9.0-10 lbm/gal.

24-HR CRUSH COMPRESSION STRENGTH



At 9.0 lbm/gal, the early compressive strength development of CircuLite CS-featherweight cement is unsurpassed by that of any other cement system at the same density.

48-HR CRUSH COMPRESSION STRENGTH



Within the density range of 9.0-10 lbm/gal, the high ultimate compressive strength of CircuLite CS-featherweight cement makes the system ideal as a primary slurry for various applications.

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