



MAGNUM VANISHING PLUG™ (LOW TEMP)

INNOVATION REVEALED

Your days of intervention are over—save money, minimize risk and reduce time to production with the **Magnum Vanishing Plug™ (Low Temp)**. With the ability to dissolve at predictable rates in temperatures as low as 100°F, this equipment can now be used in wellbores that were previously incompatible with dissolvable technology. It's just one more way Magnum Oil Tools enables operators to achieve greater efficiency.

OPTIONAL BALL-IN-PLACE FUNCTIONALITY*

Thanks to Magnum's "Liberty Bell" setting sleeve adapter, the Magnum Vanishing Plug™ has the capability of being run downhole with the ball already in place. This saves operators time associated with dropping balls from surface. The Magnum Vanishing Plug™ can also be run as a traditional ball drop plug.

* Ball-in-place feature currently only available in 5-1/2" sizes

FEATURES

- Dissolvable slips and shear release mechanism
- Environmentally safe
- Eliminates the need for milling where tubing weight is a factor, such as in long laterals
- Less than one cubic inch of solids left behind when dissolved
- Usage procedures and equipment identical to that of conventional composite plugs
- Efficient wireline deployment speeds of up to 400 feet per minute
- Proven anchoring and pack-off system design
- Wireline pumpdown compatible

For more information, and to find a representative near you, visit www.magnumoiltools.com.

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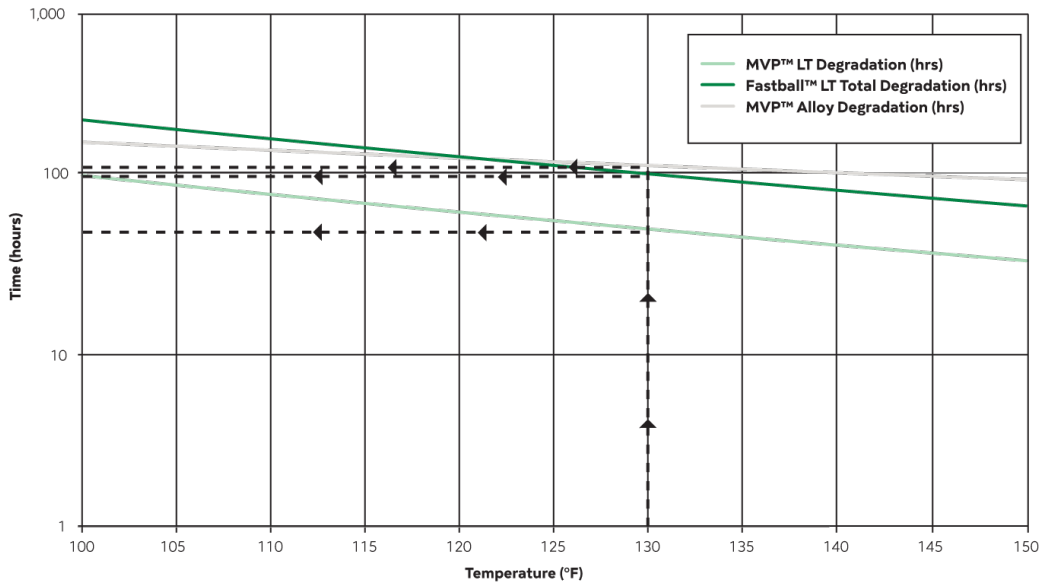
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CASING SPECS				PLUG SPECS						
O.D. inch (mm)	Weight Range lb/ft (kg/m)	Min. I.D. inch (mm)	Max. I.D. inch (mm)	Configuration	O.D. inch (mm)	I.D. inch (mm)	Length inch (mm)	Ball Size inch (mm)	Setting Tool	Pressure Rating psi (Mpa)
4-1/2 (114.3)	9.50-13.50 (14.1-20.1)	3.92 (99.6)	4.09 (103.9)	Ball Drop (Bottom Set)	3.57 (90.7)	0.60 (15.2)	14.0 (355.6)	1.75 (44.5)	Magnum A-1, Baker #10 or Owen	8k (55.1)
5-1/2 (139.7)	15.50-20.00 (23.1-29.8)	4.78 (121.4)	4.95 (125.7)	Ball Drop (Bottom Set)	4.30 (109.2)	1.00 (25.4)	18.4 (466.1)	2.125 (54.0)	Magnum A-1, Baker #20 or Owen	10k (69.0)
5-1/2 (139.7)	15.50-20.00 (23.1-29.8)	4.78 (121.4)	4.95 (125.7)	Ball in Place/Ball Drop (Top Set)	4.30 (109.2)	1.41 (35.8)	19.1 (484.6)	2.125 (54.0)	Magnum A-1, Baker #20 or Owen	

Casing Specs are according to API Tubing/Casing Dimension Chart Information.

Time for 5 1/2" MVP LT (4.30) Degradation



Example: Temperature = 130°F
 MVP™ LT Polymer Degradation = 54.6 Hours
 MVP™ LT Alloy Degradation = 129.3 Hours
 Fastball™ LT Degradation = 116.0 Hours

These estimates are based upon surface degradation testing under static conditions. Actual degradation rate will vary depending on downhole conditions and flow-back procedures.

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