EXPECTATION

Dissolvable Magnesium Alloy Rods For Downhole Dissolvable Frac Plug

- **Adjustable Alloy Chemistry**
- **Specifically Designed for Dissolvable Frac Plugs**
- **High Reliability and Consistency**
- **Original Manufacturer with Stable Supply**
- **Import-Ready for North American Markets**

Temperature Class	Minimum Tensile Strength (MPa)	Minimum Yield Strength (MPa)	Minimum Elongation (%)	Minimum Compressive Strength (MPa)	Dissolution Test Environment	Reference Dissolution Rate (mg/cm²·h)
Medium	≥300	≥210	≥5	≥380	93°C / 3% KCl	50–80
Medium	≥300	≥210	≥5	≥380	60°C / 1% KCl	0.4–0.6
Medium	≥270	≥180	≥14	≥350	93°C / 3% KCl	30–60
Medium	≥240	≥180	≥14	≥350	93°C / 3% KCl	40–70
Medium	≥300	≥220	≥5	≥380	93°C / 3% KCl	50–80
Medium	≥300	≥220	≥5	≥380	50°C / 0.84% KCl	10–25
Medium	≥320	≥240	≥7	≥390	50°C / 0.84% KCl	60–120
Medium	≥280	≥230	≥6	≥300	93°C / 3% KCl	190–410
Medium	≥280	≥230	≥6	≥300	50°C / 0.84% KCl	80–120
Medium	≥280	≥230	≥6	≥300	50°C / 0.1% KCl	40–70
High	≥370	≥260	≥3	≥430	50°C / 0.84% KCl	20–40
High	≥170	≥100	≥28	≥50	93°C / 3% KCl	20–40
High	≥380	≥300	≥5	≥420	93°C / 3% KCl	35–65
High	≥450	≥350	≥3	≥500	93°C / 3% KCl	35–70
Medium	≥210	≥150	≥16	≥250	93°C / 3% KCl	65–100
Medium	≥160	≥95	≥24	≥240	93°C / 3% KCl	25–65
Low	≥250	≥200	≥5	≥250	93°C / 3% KCl	600–800
Low	≥250	≥200	≥5	≥250	50°C / 0.84% KCl	100–180
Low	≥250	≥200	≥5	≥250	50°C / 0.1% KCl	40–80
Low	≥240	≥200	≥5	≥250	93°C / 3% KCl	350–450
Low	≥240	≥200	≥5	≥250	50°C / 0.84% KCl	45–115
Low	≥240	≥200	≥5	≥250	50°C / 0.1% KCl	25–75
Low	≥220	≥180	≥9	≥250	93°C / 3% KCl	120–160
Low	≥220	≥180	≥9	≥250	50°C / 0.84% KCl	20–60
Low	≥220	≥180	≥9	≥250	50°C / 0.1% KCl	5–20
Medium	≥320	≥230	≥5	≥380	93°C / 3% KCl	200–400
Medium	≥320	≥230	≥5	≥380	50°C / 0.84% KCl	70–110
Medium	≥320	≥230	≥5	≥380	50°C / 0.1% KCl	35–65
Low	≥110	≥80	≥40	≥40	93°C / 3% KCl	50–100
Low	≥110	≥80	≥40	≥40	50°C / 0.84% KCl	10–40
Medium	≥310	≥210	≥5	≥380	93°C / 3% KCl	40–75
Medium	≥220	≥150	≥16	≥250	93°C / 3% KCl	75–105
Medium	≥300	≥240	≥6	≥300	93°C / 3% KCl	120–210
Medium	≥300	≥240	≥6	≥300	50°C / 0.84% KCl	5–35

*All mechanical and dissolution data shown are laboratory reference values for material comparison only.

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