Velosorb™ Fast Braided Absorbable Suture

Strength when you need it most. Fast absorption. No suture removal.

There when you need it; gone when you don’t.
Covidien introduces Velosorb™ Fast braided absorbable suture for use in soft tissue approximation of the skin and mucosa, when only 7-10 days of wound support is required.¹

**Patient comfort and surgeon’s needs in mind.**

Velosorb™ Fast sutures are composed of absorbable synthetic polyester comprised of glycolide and lactide (derived from glycolic and lactic acids).

**Velosorb™ Fast suture provides:**

- Designed with patient comfort in mind - no need for suture removal
- Pliable handling and easy knot tying during closing²
- Strong wound approximation during the critical wound healing period⁴
- Fast absorption profile³
- 14-day tensile strength loss; the ideal suture for dermal and mucosa closure
- Minimal tissue drag²
- A variety of needles to meet surgeons’ needs

**Velosorb™ Fast has comparable handling performance to Vicryl Rapide™²**

<table>
<thead>
<tr>
<th>Suture Handling Performance</th>
<th>Velosorb™ Fast Suture</th>
<th>Vicryl Rapide™²</th>
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<tbody>
<tr>
<td>Tissue Drag</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>First Throw Hold</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Knot Reposition</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Square Knot Security</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Surgeon Knot Security</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Overall Performance</td>
<td>✓</td>
<td>✓</td>
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</tbody>
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**Study Design:**
Randomized, blinded product performance of side by side comparison of Velosorb™ Fast vs. Vicryl Rapide™². Sizes tested were 0, 2-0, 3-0, and 4-0.
**Velosorb™ Fast suture stays strong, then disappears.**
Velosorb™ Fast suture is stronger than Vicryl Rapide™* for the first 7 to 10 days. Velosorb™ Fast suture has no tensile strength after 14 days.³

**Velosorb™ Fast Suture Straight Pull5,6**

![Graph showing Velosorb™ Fast and Vicryl Rapide™ tensile strength over time.](image)

Results for the Straight Pull test are statistically significant (p< 0.05)

**Velosorb™ Fast Suture Knot Pull5,6**

![Graph showing Velosorb™ Fast and Vicryl Rapide™ knot pull over time.](image)

This is measured off USP Collagen diameter (mm) which is typically used to measure the diameter of short-term absorbable sutures and gut sutures

**Velosorb™ Fast compared to Gut suture**

- **Quicker Absorption:** 40-50 days
- **Lower Tissue Reactivity:** Absorbed by the body in less time
- **Suture Integrity:** Gut may fray after multiple passes
- **Predictable Strength and Absorption Profile:** Consistent composition with every strand, broken down by hydrolysis and absorbed within reproducible time frame¹
- **Less Tissue Drag:** Velosorb™ Fast has minimal tissue drag, may be preferable to twisted surface of Gut suture²
- **Reduced Potential of Reactivity:** during enzymatic absorption, Gut can result in tissue reaction

¹Please always refer to instructions for use for all indications, contraindications, warnings, precautions.
²Randomized, blinded product performance testing conducted January 19, 2012 at Covidien’s Elancourt, France facility; 13 surgeons evaluated the handling characteristics of Velosorb™ Fast, Vicryl Rapide™* and Neosorb® (Covidien Engineering Report No. FAB-006; data on file).
³FU indicates tensile strength averages for Velosorb™ Fast sutures are approximately 50% of its original tensile strength 5 days post implantation. All of the original tensile strength is gone by 14 days. Absorption of Velosorb™ Fast sutures is essentially complete between the 40th and 50th day.
⁵Velosorb™ Fast and Sam Yang suture evaluation conducted by Covidien (Covidien Engineering Report No. FAB-005; data on file).
⁶Evaluation of Velosorb™ Fast as compared to Vicryl Rapide™* conducted by Covidien (Covidien Engineering Report No. FAB-002; data on file).
What is Velosorb™ Fast suture made of?
Velosorb™ Fast braided sutures are composed of an absorbable synthetic polyester comprised of glycolide and lactide (derived from glycolic and lactic acids).

What is the coating made of?
Velosorb™ Fast sutures are prepared by coating the suture with a mixture of a glycolide and lactide copolymer and calcium stearate.

What is Velosorb™ Fast suture indicated for?
Velosorb™ Fast sutures are indicated for use in soft tissue approximation of the skin and mucosa, where only 7-10 days of wound support is required. Application for Episiotomy repair, where fast absorption is preferred, may be beneficial for patient comfort and dyspareunia. However, it is not indicated for use in ligation, ophthalmic, cardiovascular or neurological procedures.

How is Velosorb™ Fast suture absorbed?
Progressive loss of tensile strength and eventual absorption of Velosorb™ Fast sutures occurs by means of hydrolysis, where the glycolide/lactide copolymer is broken down to glycolic and lactic acids which are subsequently absorbed and metabolized by the body.

How does the Velosorb™ Fast absorption process differ from Gut?
Unlike the Velosorb™ Fast suture hydrolysis absorption process, Gut is absorbed through enzymatic degradation. This may cause inconsistent strength and absorption profiles of Gut based on the variable factors in enzymatic absorption and in the Gut material. Velosorb™ Fast suture is predictable and offers less tissue reaction due to its consistent strength and absorption profile.

How long does it take for Velosorb™ Fast suture to degrade?
Absorption begins as a loss of tensile strength without appreciable loss of mass. Studies indicate tensile strength averages for Velosorb™ Fast sutures are no less than 45% of its original tensile strength 5 days post implantation. All of the original tensile strength is essentially gone by 14 days. Absorption of Velosorb™ Fast sutures is essentially complete between the 40th and 50th day.4

What are the contraindications for Velosorb™ Fast suture?
Velosorb™ Fast sutures, being absorbable, should not be used where extended approximation of tissue beyond 7 days is required.

How is Velosorb™ Fast supplied?
- Velosorb™ Fast sutures are available in sizes 2-0 through 5-0
- Available in undyed
- On various needle types
- Available in box quantities of 12 and 36

Why is Velosorb™ Fast strength measured as % USP Collagen Specification vs. more typical Kilograms of Force (Kgf) measurement?
Since Velosorb™ Fast suture, and other fast absorbing braided products, are irradiated, the molecular structure has been altered. Thus, the standard criteria used to measure the strength of Gut and fast absorbing braided sutures is % USP Collagen Specification.