

## Ethicon Sutures— A Legacy of Innovation



Johnson Johnson

**MEDICAL DEVICES COMPANIES** 

Secure wound closure is an integral part of nearly every surgical procedure. Since 1887, Ethicon has pioneered advances in suture and needle technology that enable you to minimize tissue trauma, optimize healing, and improve patient outcomes.

#### **Triclosan-coated Antibacterial Sutures for Every Layer of Closure**

Ethicon remains the only company to offer Plus Antibacterial Technology worldwide—shown in vitro to inhibit bacterial colonization of the suture for 7 days or more.<sup>1-4</sup>

TISSUE	HEALING TIME	SUTURE	TENSILE STRENGTH RETENTION (TSR)
SKIN/MUCOSA	5-7 Days	Dyed MONOCRYL® Plus Antibacterial (poliglecaprone 25) Suture <sup>5</sup>	1 Week: 60-70% 2 Weeks: 30-40%
FAT	7-14 Days	Coated VICRYL® Plus Antibacterial (polyglactin 910) Suture <sup>6</sup>	2 Weeks: 75% 3 Weeks: 50% 4 Weeks: 25%
FASCIA	14-28 Days	PDS® Plus Antibacterial (polydioxanone) Suture <sup>7</sup>	4-0 and Smaller 2 Weeks: 60% 80% 4 Weeks: 40% 70% 6 Weeks: 35% 60%
		Dyed MONOCRYL Plus Suture⁵	1 Week: 60-70% 2 Weeks: 30-40%
ORGAN	Varies	PDS Plus Suture <sup>7</sup>	4-0 and Smaller 2 Weeks: 60% 80% 4 Weeks: 40% 70% 6 Weeks: 35% 60%

#### **Needles Precisely Designed for the Needs of Surgery**

Ethicon produces a wide range of needles that are trusted by surgeons worldwide for their quality, consistency, and strength.

Advanced needle geometry for durability, easier handling, and arming in different positions<sup>8</sup>

Trusted sutures

Unique multilayer silicone coating for consistent penetration performance\*\*

Needle alloys designed for superior strength and ductility<sup>8</sup>

### Choose the Right Ethicon Suture for the Job

#### Monofilament

Monofilament design and polymer properties minimize drag force and elicit minimal tissue reaction during absorption.

#### Multifilament/Braided

Consist of several filaments, or strands, twisted or braided together, affording greater tensile strength, pliability, and flexibility than monofilament sutures.

#### **ABSORBABLE**

Absorb over time for quick-healing wounds

### Dyed MONOCRYL® (poliglecaprone 25) Suture and Dyed MONOCRYL Plus Suture

- For subcuticular skin closure<sup>5,9</sup>
- High initial tensile strength to maintain wound approximation during critical wound-healing period<sup>8</sup>
- TSR<sup>5,9</sup>: 60-70% at 1 week; 30-40% at 2 weeks

### PDS® II (polydioxanone) Suture and PDS Plus Suture<sup>7,10</sup>

- For soft tissue approximation in multiple patient types
- Provide support to the fascia as it slowly heals
- TSR: 60% at 2 weeks, 40% at 4 weeks, 35% at 6 weeks (4-0 and smaller); 80% at 2 weeks, 70% at 4 weeks, 60% at 6 weeks (3-0 and larger)

#### Chromic Gut Suture<sup>11</sup>

- For use in general soft tissue approximation and/or ligation, including use in ophthalmic procedures, but not for use in cardiovascular and neurological tissues
- Tensile strength may be retained for 10-14 days

#### VICRYL RAPIDE™ (polyglactin 910) Suture<sup>14</sup>

- For use only in superficial soft tissue approximation of the skin and mucosa, where only short term wound support (7-10 days) is required
- TSR: 50% at 5 days

### Coated VICRYL® (polyglactin 910) Suture and Coated VICRYL Plus Suture

- (VICRYL Suture) For use in general soft tissue approximation and/or ligation, including use in ophthalmic procedures, but not for use in cardiovascular and neurological tissues<sup>15</sup>
- (VICRYL Plus Suture) For use in general soft tissue approximation and/or ligation, except for ophthalmic, cardiovascular and neurological tissues<sup>6</sup>
- Offer benefits in a range of surgical applications, including smooth tissue passage, exceptional handling, and knot security<sup>8</sup>
- TSR<sup>6,15</sup>: 75% at 2 weeks; 50% at 3 weeks; 25% at 4 weeks

#### **NON-ABSORBABLE**

Remain in the body (or require removal) for long-term support

#### ETHILON® Nylon Suture12

 For use in general soft tissue approximation and/or ligation, including use in cardiovascular, ophthalmic, and neurological procedures

#### PROLENE® Polypropylene Suture<sup>13</sup>

 For use in general soft tissue approximating and/or ligation, including use in cardiovascular, ophthalmic procedures, and neurological procedures

#### Stainless Steel<sup>8</sup>

 For use in abdominal wall closure, sternum closure, retention, skin closure, and a variety of orthopedic procedures and neurosurgery

For complete indications, contraindications, warnings, precautions, and adverse reactions, please reference full package insert.

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#### PERMA-HAND® Silk Suture16

- For use in general soft tissue approximating and/or ligation, including use in cardiovascular, ophthalmic, and neurological procedures
- Silk for braided sutures is processed to remove the natural waxes and gums, coated with wax or silicone and is available undyed and dyed black

References: 1. Rothenburger S, Spangler D, Bhende S, Burkley D. In vitro antimicrobial evaluation of coated Vicryl Plus Antibacterial Suture (coated polyglactin 910 with triclosan) using zone of inhibition assays. *Surg Infect (Larchmt)*. 2002;3(suppl):S79-S87. 2. Ming X, Rothenburger S, Yang D. In vitro antibacterial efficacy of Monocryl Plus Antibacterial Suture (poligelcaprone 25 with triclosan). *Surg Infect (Larchmt)*. 2007;8(2):201-207. 3. Ming X, Rothenburger S, Nichols MM. In vivo and in vitro antibacterial efficacy of PDS Plus (polidioxanone with triclosan) suture. *Surg Infect (Larchmt)*. 2008;9(4):451-457. 4. Edmiston CE, Seabrook GR, Goheen MP, et al. Bacterial adherence to surgical sutures: can antibacterial coated sutures reduce the risk of microbial contamination? *J Am Coll Surg*. 2006;203:481-489. 5. Dyed MONOCRYL® Plus Antibacterial (polyglacin 910) Suture Instructions for Use. Ethicon, Inc. 2005. 6. Coated VICRYL® Plus Antibacterial (polyglacin 910) Suture Instructions for Use. Ethicon, Inc. 2017. 7. PDS® Plus Antibacterial (polyglacin 910) Suture Instructions for Use. Ethicon, Inc. 2006. 8. Wound Closure Manual. Ethicon, Inc. 2012. 9. Dyed MONOCRYL® (poliglecaprone 25) Suture Instructions for Use Ethicon, Inc. 1996. 10. PDS® II (polydioxanone) Suture Instructions for Use. Ethicon, Inc. 2006. 11. Surgical Gut Suture Instructions for Use. Ethicon, Inc. 1995. 12. ETHILDN® Nylon Suture Instructions for Use. Ethicon, Inc. 1995. 13. PROLENE® Polypropylene Suture Instructions for Use. Ethicon, Inc. 2014. 16. PERMA+HAND® Silk Suture Instructions for Use. Ethicon, Inc. 2014. 16. PERMA+HAND® Silk Suture Instructions for Use. Ethicon, Inc. 2014. 16. PERMA+HAND® Silk Suture Instructions for Use. Ethicon, Inc. 2014. 16. PERMA+HAND® Silk Suture Instructions for Use. Ethicon, Inc. 2014. 16. PERMA+HAND® Silk Suture Instructions for Use. Ethicon, Inc. 2014. 16. PERMA+HAND® Silk Suture Instructions for Use. Ethicon, Inc. 2014. 16. PERMA+HAND® Silk Suture Instructions for Use. Ethicon, Inc. 2014. 16. PERMA+HA