ETHICON

PART OF THE Johnson & Johnson FAMILY OF COMPANIES

PRODUCT CATALOG

Sutures

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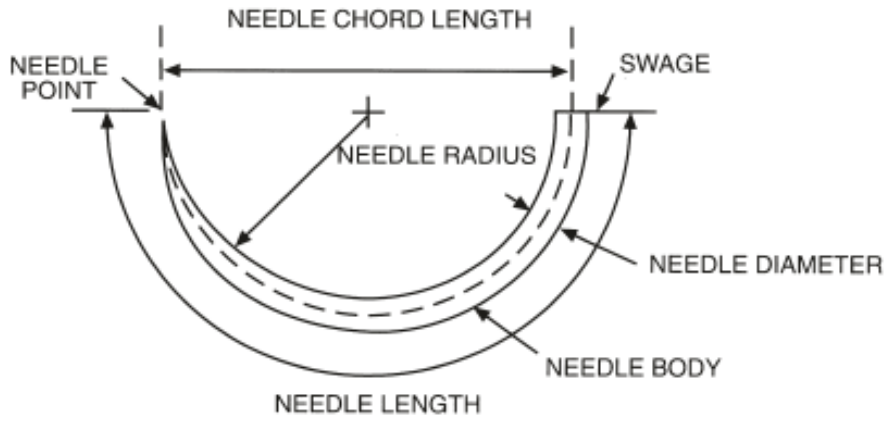
Anatomy of a Needle



Needle Point — Needles can taper to a point or have cutting edges.

Taper Ratio — Longer points for improved penetration.

Needle Body

Needle flat — Flatted section for stability in the needle holder.

Ribs — In larger needles there is a ribbed section to provide a secure grip.

Square Body — Needles can also have a square body for increased strength.

Swage — A hole is drilled into the end of the wire and the material is attached into this hole. For premium needles the needles are laser drilled which provides a smooth transition between needle and material thus reducing tissue trauma.

Types

Conventional Cutting Needle

Two opposing cutting edges, with a third on inside curve. Change in cross-section from a triangle cutting tip to a flattened body.

Conventional Spatula Needle

Visibility of the point at bottom provides control of depth penetration.

ETHIGUARD® Blunt Point Needle

Taper body. For blunt dissection and suturing friable tissue.

MICRO-POINT® Reverse Cutting Needle

Cutting edge on outer curve. Extremely smooth. Extremely sharp for ophthalmic surgery.

MICRO-POINT® Surgical Needle (Spatula)

Thin, flat profile. Specially designed for ophthalmic anterior segment surgery.

Precision Cosmetic - Conventional Cutting PRIME® Needle

For delicate plastic or cosmetic surgery. Conventional cutting tip and PRIME geometry for increased sharpness in the tip leading to a flattened body.

Precision Point - Reverse Cutting PRIME Needle

For plastic or cosmetic surgery, reverse cutting tip and PRIME geometry for increased sharpness in the tip.

Reverse Cutting Needle

Cutting edge on outer curve. For tough, difficult-to-penetrate tissues.

SABRELOC® Spatula Needle

Side-cutting spatula shaped edges. For layers of scleral or corneal tissue. Spatulated needle point is centered for maximum needle stability in thin sclera. Four equidistant and properly defined edges provide greater control.

TAPERCUT® Surgical Needle

Cutting tip, taper body. For tough tissue, like two needles in one.

Taperpoint Needle

For soft, easily penetrated tissues.

ULTIMA® Ophthalmic Needle (Spatula)

Reduced edge-angles provide better penetration. Readily facilitates knot rotation in ophthalmic surgery.

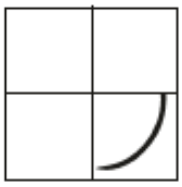
VISI-BLACK™ Surgical Needle

Slim taper point needles with a black finish for improved visibility.

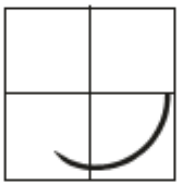
Needle Shape

The choice of needle shape is frequently governed by the accessibility of the tissue to be sutured, and normally the more confined the operative site the greater the curvature required. The basic shapes involved are:

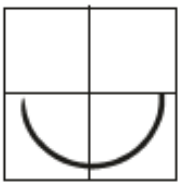
1/4 Circle



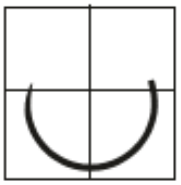
3/8 Circle



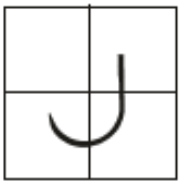
1/2 Circle



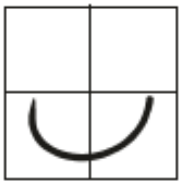
5/8 Circle



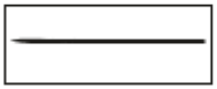
J Shape



Compound Curve



Straight



ETHICON
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THE QUALITY
YOUR PATIENTS DESERVE

ABSORBABLE SUTURES

ABSORBABLE SUTURES	PHYSICAL CHARACTERISTICS	COLOR	REMAINING TENSILE STRENGTH (% of the original strength) 1 w.	2 w.	3 w.	4 w.	6 w.	ABSORPTION RATE	KNOT TYING
VICRYL® Rapide Polyglactin 910	Multifilament, coated	Violet Undyed	50% (5 days)	0% (10-14 days)				42 days	1=1=1=1
MONOCRYL® Polyglecaprone 25 MONOCRYL® Plus Antibacterial Polyglecaprone 25	Monofilament	Violet Undyed	60% 50%	30% 20%	0%	0%		90 - 120 days	1=1=1=1**
VICRYL® (6-0 and larger*) Polyglactin 910 VICRYL® Plus Antibacterial Polyglactin 910	Multifilament, coated	Violet / Undyed		75 %	50 %	25 %		56 - 70 days	2=1=1=1 / 1=1=1=1
PDS®II (3-0 and larger*) Polydioxanone PDS® Plus Antibacterial	Monofilament	Violet / Undyed		80 %		70 %	60 %	182 -238 days	1=1=1=1**

NON-ABSORBABLE SUTURES

NON-ABSORBABLE SUTURES	PHYSICAL CHARACTERISTICS	COLOR	KNOT TYING
PROLENE® Polypropylene	Monofilament	Blue / Undyed	1=1=1=1/ 2=1=1=1**
PRONOVA® Poly(hexafluoropropylene-VDF)	Monofilament	Blue	1=1=1=1/ 2=1=1=1**
ETHIBOND® Polyester	Multifilament, coated	Green / White	2=1=1=1 / 1=1=1=1*
MERSILENE® Polyester	Multifilament	Green / White	2=1=1=1
ETHILON® Polyamide	Monofilament	Black / Blue	1=1=1=1/ 2=1=1=1**
NUROLON® Polyamide	Multifilament, coated	Black	2=1=1=1
SILK	Multifilament	Black/White/Blue	1=1=1=1
STEEL	Monofilament / Multifilament	Undyed	1=1=1=1

* = Check the catalog for information on thinner sizes
** = Additional throws may be particularly appropriate when knotting any monofilament material

Johnson & Johnson AB, Kolonnvägen 45, 170 67 Solna, SWEDEN
v1-2020

Johnson & Johnson Nordic

VICRYL* Rapide
(Polyglactin 910)

SUTURE

Description:	Braided	For easy handling and secure knot tying.
	Coated	For smooth passage through tissue and easy knot tie down.
	Synthetic	For minimal tissue reaction.
	Absorbable	By hydrolysis. Essentially complete in 42 days.

Tensile strength:	Post implantation	Approximate % original strength remaining
	5 days	50%
	10-14 days	0%

VICRYL* Rapide suture typically falls off 7-10 days post-operative or can be wiped off subsequently with gauze. Normally the removal of the suture is not required.

Color: Undyed or violet.

Range: 8-0 to 1 (USP). Supplied as needled sutures and ligatures.

Indications: VICRYL* Rapide is intended for use in soft tissue approximation where only short term wound support is required and where the rapid absorption of the suture would be beneficial. Typical areas of use include:

- Skin closure, cuticular or subcuticular
- Episiotomies
- Closure of oral mucosa
- Conjunctival sutures in ophthalmic surgery

Full details in the Instruction for Use included in every package.

VICRYL*
(Polyglactin 910) Braided and Monofilament

SUTURE

Description:	Braided	For easy handling and secure knot tying.
	Coated	For smooth passage through tissue and easy knot tie down.
	Synthetic	For minimal tissue reaction.
	Absorbable	By hydrolysis. Essentially complete in 56-70 days.
Tensile strength:	Post implantation	Approximate % original strength remaining
	14 days	75%
	21 days	50% (6-0 and larger) 40% (7-0 and smaller)
	28 days	25% (6-0 and larger)
Color:	Violet or undyed.	
Range:	10-0 to 6 (USP). Supplied as needled sutures and ligatures. Sizes 10-0 and 9-0 are monofilament in structure.	

Indications:

VICRYL* sutures are intended for use in soft tissue approximation and/or ligation, including use in ophthalmic surgery, peripheral nerve adaptation and microsurgery for vessels less than 2 mm in diameter.
Typical areas of use include:

- Fascia closure - due to the 28-day claim
- Subcutaneous fat
- Joint capsule
- Uterus

Full details in the Instruction for Use included in every package.

VICRYL* Plus
(Polyglactin 910) Braided Antibacterial

SUTURE

Description:	Braided	For easy handling and secure knot tying.
	Coated	For smooth passage through tissue and easy knot tie down.
	Synthetic	For minimal tissue reaction.
	Absorbable	By hydrolysis. Essentially complete in 56-70 days.

Tensile strength:	Post implantation	Approximate % of original strength remaining
	14 days	75%
	21 days	50%
	28 days	25%

Color: Violet or undyed.

Range: 5-0 to 2 (USP). Supplied as needled sutures and ligatures.

Indications: VICRYL* Plus sutures are intended for use in soft tissue approximation and/or ligation, including use in microsurgery for vessels less than 2 mm in diameter. The safety and effectiveness of VICRYL* Plus sutures in cardiovascular tissue, ophthalmic surgery and neurological tissue have not been established. Typical areas of use include:

- Fascia closure - due to the 28-day claim
- Subcutaneous fat
- Joint capsule
- Uterus

Protection against bacterial colonization

In vitro studies demonstrate, that VICRYL* Plus suture has a zone of inhibition that is effective against the pathogens that most frequently cause surgical site infection, including *Staphylococcus aureus*, methicillin resistant *Staphylococcus aureus* (MRSA), *Staphylococcus epidermidis* and methicillin resistant *Staphylococcus epidermidis* (MRSE).

Full details in the Instruction for Use included in every package.

MONOCRYL*
(Poliglecaprone 25) Monofilament

SUTURE

Description:

Monofilament	For smooth passage through tissue.
Synthetic	For minimal tissue reaction.
Absorbable	By hydrolysis. Essentially complete in 90 -120 days.

Tensile strength:

Post implantation	Approximate % original strength remaining
7 days	60% (violet) 50% (undyed)
14 days	30% (violet) 20% (undyed)
21 days	0% (undyed)
28 days	0% (violet)

Color: Violet or undyed.

Range: 6-0 to 1 (USP). Supplied as needled sutures and ligatures.

Indications: MONOCRYL* sutures are intended for use in general soft tissue approximation and/or ligation where an absorbable material is indicated. Typical areas of use include:

- Subcuticular sutures
- Small intestine anastomoses
- Urological anastomoses

Full details in the Instruction for Use included in every package.

MONOCRYL* Plus
(Poliglecaprone 25) Antibacterial

SUTURE

Description:

Monofilament	For smooth passage through tissue.
Synthetic	For minimal tissue reaction.
Absorbable	By hydrolysis. Essentially complete in 90 -120 days.

Tensile strength:

Post implantation	Approximate % original strength remaining
7 days	60% (violet)
	50% (undyed)
14 days	30% (violet)
	20% (undyed)
21 days	0% (undyed)
28 days	0% (violet)

Color: Violet or undyed.

Range: 6-0 to 1 (USP). Supplied as needled sutures and ligatures.

Indications: MONOCRYL* Plus sutures are intended for use in general soft tissue approximation and/or ligation where absorbable material is indicated. Typical areas of use include:

- Subcuticular sutures
- Small intestine anastomoses
- Urological anastomoses

Protection against bacterial colonization

In vitro studies demonstrate, that MONOCRYL* Plus suture has a zone of inhibition that is effective against the pathogens that most frequently cause surgical site infection, including *Staphylococcus aureus*, methicillin resistant *Staphylococcus aureus* (MRSA), *Staphylococcus epidermidis*, methicillin resistant *Staphylococcus epidermidis* (MRSE), *E. coli* and *Klebsiella pneumoniae*.

Full details in the Instruction for Use included in every package.

PDS* II
(Polydioxanone) Monofilament

SUTURE

Description:	Monofilament	For smooth passage through tissue.
	Synthetic	For minimal tissue reaction.
	Absorbable	By hydrolysis. Essentially complete in 182-238 days.
Tensile strength:	Post implantation	Approximate % original strength remaining
	14 days	80% (3-0 and larger) 60% (4-0 and smaller)
	28 days	70% (3-0 and larger) 40% (4-0 and smaller)
	42 days	60% (3-0 and larger) 35% (4-0 and smaller)
Color:	Violet or undyed.	
Range:	7-0 to 2 (USP). Supplied as needled sutures and ligatures.	

Indications:

PDS* II sutures are intended for use in general soft tissue approximation, including use in pediatric cardiovascular tissue, in microsurgery and in ophthalmic surgery. PDS* II sutures are particularly useful where the combination of an absorbable suture and extended wound support is desirable. Typical areas of use include:

- Abdominal wall closure
- Intestinal anastomoses
- Ligament and tendon repair

Full details in the Instruction for Use included in every package.

PDS* PLUS
(Polydioxanone) Antibacterial Monofilament

SUTURE

Description:	Monofilament	For smooth passage through tissue.
	Synthetic	For minimal tissue reaction.
	Absorbable	By hydrolysis. Essentially complete in 182-238 days.

Tensile strength:	Post implantation	Approximate % of original strength remaining
	14 days	80% (3-0 and larger) 60% (4-0 and smaller)
	28 days	70% (3-0 and larger) 40% (4-0 and smaller)
	42 days	60% (3-0 and larger) 35% (4-0 and smaller)

Color: Violet or undyed

Range: 6-0 to 1 (USP). Supplied as needled sutures and ligatures.

Indications: PDS* Plus Antibacterial Sutures are intended for use in general soft tissue approximation, including in paediatric cardiovascular tissue, and in ophthalmic surgery (other than contact with cornea and sclera). PDS* Plus Antibacterial Sutures are particularly useful where the combination of absorbable suture and extended wound support is desirable. Typical areas of use include:

- Abdominal wall closure
- Intestinal anastomoses
- Ligament and tendon repair

Protection against bacterial colonization

In vitro studies demonstrate, that PDS* Plus Antibacterial Suture has a zone of inhibition that is effective against the pathogens that most frequently cause surgical site infection, including Staphylococcus aureus, methicillin resistant Staphylococcus aureus (MRSA), Staphylococcus epidermidis, methicillin resistant Staphylococcus epidermidis (MRSE), E. coli and Klebsiella pneumoniae.

Full details in the Instruction for Use included in every package.

PROLENE*
Monofilament Polypropylene

SUTURE

Description:

Monofilament	For smooth passage through tissue.
Synthetic	For minimal tissue reaction.
Non-absorbable	Provides permanent tensile strength retention in tissue.

Color: Blue or clear.

Range: 10-0 to 2 (USP). Supplied as needled sutures, armed with, for example, EVERPOINT* Tungsten-Rhenium needles, VISI-BLACK* needles, MULTIPASS* needles or CC-needles. Also available with pledgets.

PROLENE* sutures are also available as HEMO-SEAL*, with suture diameter to needle diameter ratio close to 1. HEMO-SEAL* is particularly useful in reducing needle hole leakage (for example in synthetic vascular grafts).

Indications: PROLENE* sutures are intended for use in general soft tissue approximation and/or ligation, including use in cardiovascular, ophthalmic and neurosurgical procedures. Typical areas of use include:

- Cardiovascular anastomoses
- Subcuticular sutures

Full details in the Instruction for Use included in every package.

ETHILON*
Monofilament Polyamide 6

SUTURE

Description:	Monofilament	For smooth passage through tissue.
	Synthetic	For minimal tissue reaction.
	Non-absorbable	Provides prolonged tensile strength retention in tissue.

Color: Green, black or clear.

Range: 11-0 to 2 (USP). Supplied as needled sutures armed with, for example, MULTIPASS* and PRIME* needles. ETHILON* is also available as ligatures.

Indications: ETHILON* (black, green and clear) sutures are intended for use in general soft tissue approximation and/or ligation, including use in cardiovascular, ophthalmic, microsurgical and neurosurgical procedures. Blue ETHILON* sutures are intended for use in skin closure. Typical areas of use include:

- Cuticular sutures
- Nerve adaptation
- Ophthalmology

Full details in the Instruction for Use included in every package.

ETHIBOND* Excel
Polybutylate Coated Polyester

SUTURE

Description:

Braided	For easy handling and secure knot tying.
Coated	For smooth tie down and easy passage through tissue.
Synthetic	For minimal tissue reaction.
Non-absorbable	Provides permanent tensile strength retention in tissue.

Color: Green or white.

Range: 7-0 to 6 (USP). Supplied as needled sutures or ligatures. With or without pledgets.

Indications: ETHIBOND* sutures are intended for use in general soft tissue approximation and/or ligation, including use in cardiovascular, ophthalmic and neurosurgical procedures. Typical areas of use include:

- Heart valve fixation
- Ligament and tendon repair
- Retraction sutures

Full details in the Instruction for Use included in every package.

SILK
Braided Silk / Virgin silk

SUTURE

Description:	Braided	For easy handling and secure knot tying.
	Coated	With wax for easy handling.
	Natural	Produced from cocoons of the silk worm *Bombyx Mori*.
	Non-absorbable	Provides prolonged tensile strength retention in tissue for up to 3 months.
Color:	Black or white.	
Range:	10-0 to 4 (USP). Supplied as needled sutures or ligatures. Sizes 10-0 to 8-0 are manufactured of virgin silk and are twisted in construction. Virgin silk fibres are held together by natural gum secreted by the silk worm.	
Indications:	SILK sutures are intended for use in general soft tissue approximation and/or ligation, including use in cardiovascular, ophthalmic and neurosurgical procedures. Typical areas of use include: •Ophthalmic surgery •Dental surgery •Ligation	

Full details in the Instruction for Use included in every package.

MERSILENE*
Polyester

SUTURE

Description:

Braided	For easy handling and secure knot tying.
Synthetic	For minimal tissue reaction.
Non-absorbable	Provides permanent tensile strength retention in tissue.

Color: Green or white.

Range: 10-0 to 3 (USP). Supplied as needled sutures or ligatures. Size 10-0 is monofilament in structure.

Indications: MERSILENE* sutures are intended for use in general soft tissue approximation and/or ligation, including use in cardiovascular, ophthalmic and neurosurgical procedures. Typical areas of use include:

- Dental surgery
- Ophthalmic surgery
- Ligation

Full details in the Instruction for Use included in every package.