

CATALOGUE OF  
**SUTURES & LIGATURE**



**CE**

EN ISO 13485:2012 Certified

**SRI** **orion**<sup>TM</sup>  
**SUTURES**

Since 1994

*We Believe Quality is the Key to Success,*

**Orion Sutures (India) Pvt. Ltd.** (Formerly known as Sri Orion Pharmaceuticals & Sutures) is engaged in the manufacture of entire range of sterilized **Absorbable and Non-Absorbable of Surgical Sutures & also Micro Sutures.**

Established in 1994, Sri Orion Pharmaceuticals & Sutures is Located in Bangalore (India). The firm is also licensed to manufacture sterile sutures by the Regulatory Authority in our country (India) under the Drugs & Cosmetics Act 1945 and Holding License No.KTK/28/268/94

Established in the year 1994, we have gained a great name in the domain of manufacturing, supplying and exporting all kinds of sterile and non sterile Surgical Sutures. Our products are appreciated for their non-reactive nature, cost-effectiveness and great strength, owing to which these are highly demanded by our clients located worldwide. Our products are marketed under the brand **ORION SUTURES** and are diligently manufactured using the best raw materials at our state-of-the-art infrastructure. In order to ensure that only high quality products reach our clients, we conduct strict quality checks before their final dispatch. Furthermore we offer these in neutral packing that have increased their demand among our valuable clients. To facilitate our clients in the best possible manner, we offer the reliable OEM services.

We have always known that we manufacture the highest quality Sterile Suture products and in the SUTURE industry where quality is so important, we wanted another way to back up that claim. ISO 13485:2012 & CE the International quality standard accepted by the majority of the world. It speaks to all quality-related activities in an organization and helps ensure customer's needs are met and focus on quality in order to gain a competitive edge and to access global markets.

### **Orion Sutures (India) Pvt. Ltd.'s Specialties:**

- World Class Manufacturing Facility with Class 10000 Production area and Class 100 Area QC meeting ISO 14644-1 requirements
- The manufacturing and testing is manned and Operated by Sri ORION's Competent and Devoted Staff who are experienced and qualified staff duly approved by the Regulatory Authority. The Manufacturing and testing conforms to the requirements for surgical sutures as specified in the United States Pharmacopeia (USP).
- All the equipments are calibrated regularly
- Any suture needle combination, we offer both 312 and 420 Atraumatic needles.
- In House Sterility testing for giving the Best Quality Product
- Economical Price.
- Delivery within 30 days.
- "International Color Coding" for Suture.
- OEM Brands.

- Samples & Special Prices for Tenders.
- All Sutures comply with international standards which are at least 1.1 times the USP standards for Tensile strength & Needle pull.
- All sutures are attached to drilled end ribbed needles for better grip in needle holder during surgery.
- Neutral Packing is also available

## Our VISION

ORION sutures are being used in most of the hospital, having reduced the cost of healthcare to the patient by means of the most affordable pricing strategy. As we have specialized in the ophthalmic range of sutures our reasonable pricing strategy has helped the patient in reducing the cost of surgery.

## Our MISSION

To produce excellent products and to be fair in our dealings by providing our customers with the Best quality products at a reasonable price.

## Our MARKET

Since the year 2000 we have been exporting through merchant Exporters.

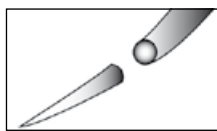
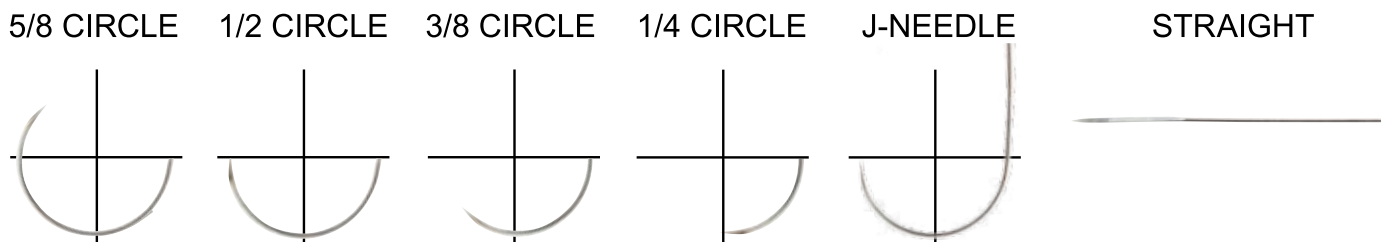
We boast of a vast clientele that spans across East Europe, USA, Australia/NZ, Iran, East/Middle Africa, North Europe, North Africa, East Asia, South/West Africa, Middle East, South/West Europe, Indian Subcontinent, Bangladesh, Sri Lanka and South East Asia. and neighboring states in INDIA.

## OUR PRODUCTS

Absorbable Surgical Suture		Non Absorbable Surgical Suture	
ORYL <sup>TM</sup> / ORICRYL <sup>TM</sup>	6	SYNTHALIN <sup>®</sup> / ORILENE <sup>TM</sup>	22
ORYL910 <sup>TM</sup> / ORICRYL910 <sup>TM</sup>	10	DURASIL <sup>®</sup> / ORISILK <sup>®</sup>	25
ORYL MONO <sup>®</sup> / ORICRYL MONO <sup>®</sup>	13	DURASIL <sup>®</sup> / ORISILK <sup>®</sup> (Virgin Silk)	28
ORYL PD MONO <sup>TM</sup> / ORICRYL PDS <sup>®</sup>	15	NEOBOND <sup>®</sup>	29
ORIGUT <sup>®</sup>	17	ORLON <sup>®</sup>	30
ORICHROME <sup>TM</sup>	19	ORISTEEL <sup>®</sup>	33

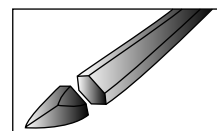
# NEEDLE TYPES

Orion surgical needles are manufactured from highest quality stainless steel grades for outstanding performance, combining high ductility and strong bending moment. Advanced silicon coating ensures smooth penetration and reduced tissue trauma. The shape of the needle body is designed in order to allow maximum stability in the needle holder.



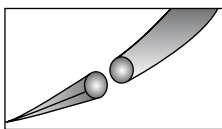
### TAPER POINT

A gradual taper to a round bodied needle.



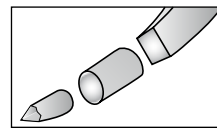
### SIDE CUTTING SPATULA NEEDLES

Needle with cutting edges on the two sides.



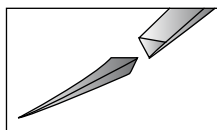
### TAPERCUT POINT

Balanced, cutting point-tapering into a round bodied needle.



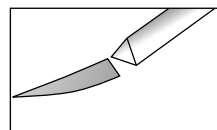
### SOFT CUTTING POINT - CORONARY

A minute point followed by a round body and a rectangular main body for better penetration in cardiovascular surgery.



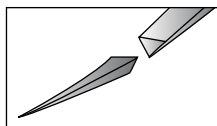
### REVERSE CUTTING

A triangular body offers a third cutting edge on the outer convex curvature.



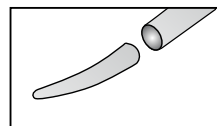
### CONVENTIONAL CUTTING

A triangular body offers a third cutting edge on the inside concave curvature.



### EASY PASS NEEDLE

Precision point with extra sharpening.



### BLUNT NEEDLE

Cylindrical bodied needle with a rounded point. For soft tissue such as in liver and kidneys. Reduced risk of needle stick injuries.



# SUTURE SIZE & DIAMETER



## SUTURE SIZE & DIAMETER

USP SIZE		DIAMETER LIMITS (IN MM)	METRIC SIZE
ABSORBABLE SUTURES (Catgut Chromic & Plain)	NONABSORBABLE & SYNTHETIC ABSORBABLE SUTURES		
-----	10-0	0.020 - 0.029	0.2
-----	9-0	0.030 - 0.039	0.3
-----	8-0	0.040 - 0.049	0.4
-----	7-0	0.050 - 0.069	0.5
-----	6-0	0.070 - 0.099	0.7
6-0	5-0	0.100 - 0.149	1
5-0	4-0	0.150 - 0.199	1.5
4-0	3-0	0.200 - 0.249	2
3-0	2-0	0.300 - 0.339	3
2-0	0	0.350 - 0.399	3.5
0	1	0.400 - 0.499	4
1	2	0.500 - 0.599	5
2	3 & 4	0.600 - 0.699	6
3	5	0.700 - 0.799	7

ORYL / ORICRYL (Polyglycolic Acid) is an ideal and time tested synthetic absorbable suture, widely used by surgeons. All over the world. PGA's superior features over catgut are predictable absorption, outstanding tensile strength, in-vivo inertness and excellent handling properties.

<b>Type</b>	: Braided and coated multifilament
<b>Material</b>	: 100% Polyglycolic acid
<b>Color</b>	: Violet
<b>Tissue reaction</b>	: Minimal
<b>Absorption</b>	: The hydrolytic action by which the material is broken down results in total absorption in approximately 60 to 90 days. Approximately 50% of tensile strength remains after 21 days.
<b>Tensile Strength</b>	: 75% tensile strength is retained for 14 days and 50% till 21 days.
<b>USP Range</b>	: 6/0 – 2
<b>Sterilization</b>	: EO (Ethylene Oxide)
<b>Needle Type</b>	: Round bodied, cutting edge, taper point, straight, blunt point
<b>Packing</b>	: In aluminium foil packages with or without needle

### CHARACTERISTICS

- ✓ High tensile strength
- ✓ Synthetic
- ✓ Breaks down by hydrolysis
- ✓ Braided structure
  
- ✓ Coated multifilament
  
- ✓ Hermetically sealed packing

### BENEFITS

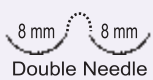


- Excellent tissue support
- Minimal tissue reaction
- Predictable absorption rate
- Excellent handling properties, High flexibility, High tensile strength, Excellent knot security
- Soft passage through the tissues with minimal sawing, tissue drag and trauma. Good knot tie down / adjustability Reduced capillary action
- Guaranteed seal and product sterility


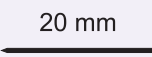
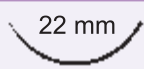
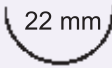


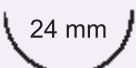
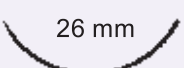
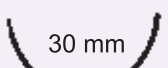
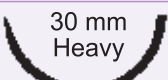
### INDICATIONS


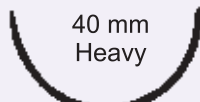


General soft tissue closing and/or ligation. Especially in  
General surgery, Skin closure, Gastrointestinal surgery, Gynecology, Obstetrics  
Plastic surgery, Urology, Ophthalmic surgery, Orthopedics

### CONTRAINDICATIONS





- Cardiovascular surgery
- Neurosurgery
- Being absorbable not to use when an Extended wound support is required.

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP			
			6-0(0.7)	5-0(1)	4-0(1.5)	3-0(2)
 8 mm 8 mm Double Needle	1/4 circle micro point spatulated	45 cm	OS 2670			
 12 mm	3/8 Circle Reverse Cutting	45 cm		OS 2493	OS 2494	OS 2495
 16 mm	3/8 Circle Cutting Prime	45 cm		OS 2442	OS 2443	OS 2471

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP				
			4-0(1.5)	3-0(2)	2-0(3)	1-0(3.5)	1(4)
 20 mm	1/2 Circle Round Bodied	70 cm	OS 2304	OS 2437			
 20 mm	Straight Round body(SRS needle)	45 cm					OS 2545
 22 mm	3/8 Circle Cutting	45 cm		OS 2401			
 22 mm	1/2 Circle Cutting	90 cm		OS 2472			
 23 mm Heavy	1/2 Circle Reverse cutting	45 cm				OS 2826E	
 24 mm	5/8 circle reverse cutting	45 cm				OS 2510 AD	
 24 mm	1/2 Circle Reverse cutting	45 cm				OS 2510	
 26 mm	3/8 Circle Reverse Cutting	76 cm Undyed		OS 2407U			
 30 mm	1/2 Circle Round Bodied	70 cm			OS 2341	OS 2342	
		90 cm			OS 2317	OS 2338	
 30 mm Heavy	1/2 circle taper cutting	45 cm					OS 2511

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP			
			3-0(2)	2-0(3)	1-0(3.5)	1(4)
 36 mm OS	1/2 Circle Reverse cutting	90 cm			OS 2534	
 40 mm	1/2 Circle Round Bodied	70 cm			OS 2546	
		90 cm		OS 2345	OS 2346	
		115 cm			OS 2346+	
 40 mm Heavy	1/2 Circle Round Bodied	70 cm				OS 2359
		90 cm				OS 2347
		115 cm				OS 2347+
 40 mm Heavy      40 mm Heavy Double Needle	1/2 Circle Round Body and 1/2 Circle taper cutting	160 cms				OS 2160
		140 cms			OS 2346 DA	OS 2347 DA
 40 mm	1/2 Circle Reverse Cutting	45 cm		OS 2382S		
		90 cm		OS 2382		
 40 mm	1/2 Circle Taper cutting	45 cm			OS 2361	
		90 cm			OS 2518	
		115cm			OS 2518+	
 40 mm OS	1/2 Circle Reverse cutting	90 cm				OS 2421



NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP		
			2-0	1(4)	2(5)
 <p>40 mm Heavy</p>	1/2 Circle Taper cutting	90 cm		OS 2364	
 <p>40 mm</p>	1/2 Circle Reverse Cutting	90 cm	OS 2382	OS 2486	OS 2351
 <p>45 mm Heavy</p>	1/2 Circle Round Bodied	90 cm			OS 2228
 <p>50 mm Heavy</p>	1/2 Circle Round Bodied	115 cm		OS 2448+	

## PRE-CUT SUTURES

SUTURE LENGTH	PACKAGING	SUTURE SIZE IN USP		
		2-0	1-0	1
1 x 150 cm	PGA in sterile foil over wrap pack 150 cms Box of 12's pack	OS 2203	OS 2204	OS 2205

## Synthetic Absorbable Surgical Suture

**ORYL910 / ORICRYL910 (Polyglactin 910)** suture is most widely used braided and coated synthetic absorbable suture in the world. On account of its superior properties, this suture has replaced catgut sutures in most applications. Polyglactin 910 suture is a synthetic absorbable sterile surgical suture composed of a copolymer made from 90% Glycolide and 10% L-lactide.

<b>Type</b>	: Braided and coated multifilament
<b>Material</b>	: Polyglycolide (90%) - co-lactide (10%) synthetic absorbable braided surgical suture
<b>Color</b>	: Violet
<b>Tissue reaction</b>	: Minimal
<b>Absorption</b>	: The hydrolytic action by which the material is broken down results in total absorption in approximately 42 days. Approximately 50% of tensile strength remains after 7 days.
<b>Tensile Strength</b>	: 75% tensile strength is retained for 14 days and 50% till 21 days.
<b>USP Range</b>	: 6/0 – 2
<b>Sterilization</b>	: EO (Ethylene Oxide)
<b>Needle Type</b>	: Round bodied, cutting edge, taper point, straight, blunt point
<b>Packing</b>	: In aluminium foil packages with or without needle

### CHARACTERISTICS

- High tensile strength
- Synthetic
- Breaks down by hydrolysis
- Braided structure
- Coated multifilament
- Hermetically sealed packing

### BENEFITS

- Excellent tissue support
- Minimal tissue reaction
- Predictable absorption rate
- Excellent handling properties, High flexibility, High tensile strength, Excellent knot security
- Soft passage through the tissues with minimal sawing, tissue drag and trauma. Good knot tie down / adjustability Reduced capillary action
- Guaranteed seal and product sterility

### INDICATIONS

Superficial soft tissue closing of skin and mucosa only.

Especially in ·Plastic surgery, ·Obstetrics (Episiotomy repair), ·Gynecology, ·Urology (Circumcision)  
·Ophthalmic surgery (Conjunctiva), ·Pediatric surgery.






### CONTRAINDICATIONS










- Cardiovascular surgery
- Neurosurgery
- Ligation
- When wound support for more than 7 days is required

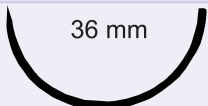

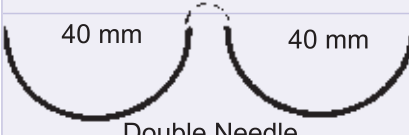


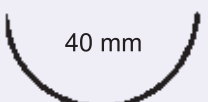
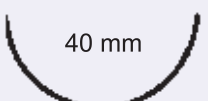


# ORYL910™ /ORICRYL910™



Synthetic Absorbable Surgical Suture

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP			
			6-0(0.7)	5-0(1)	4-0(1.5)	3-0(2)
 8 mm Double Needle	1/4 circle micro point spatulated	45 cm	OS 2670			
 12 mm	3/8 Circle Reverse Cutting	45 cm		OS 2493	OS 2494	OS 2495
 16 mm	1/2 Circle Round Body	45 cm		OS 2303		
 16 mm	5/8 Circle Cutting	45 cm			OS 2465	
 16 mm	3/8 Circle Prime Cutting	45 cm		OS 2442	OS 2443	OS 2471

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP				
			4-0(1.5)	3-0(2)	2-0(3)	1-0(3.5)	1(4)
 17 mm	1/2 Circle Taper Cutting	45 cm		OS 2515			
 20 mm	1/2 Circle Round Bodied	70 cm	OS 2304	OS 2437			
 22 mm	3/8 Circle Cutting	45 cm		OS 2401			
 22 mm	1/2 Circle Cutting	90 cm		OS 2472			
 23 mm	1/2 Circle Reverse cutting (Heavy)	35 cm					OS 2826
 27 mm	5/8 Circle Round Bodied	115cm			OS 2602		
 30 mm	1/2 Circle Round Bodied	70 cm			OS 2341	OS 2342	
		90 cm			OS 2317	OS 2338	
 30 mm Heavy	1/2 circle taper cutting	45 cm					OS 2511
 36 mm	1/2 Circle Taper cutting	90 cm		OS 2516			

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP			
			2-0(3)	1-0(3.5)	1(4)	2 (5)
 36 mm	½ Circle Reverse cutting(OS)	90 cm		OS 2534		
 40 mm	1/2 Circle Round Bodied	70 cm	OS 2345			
		90 cm		OS 2346		
		115 cm		OS 2346+		
 40 mm 40 mm Double Needle	1/2 Circle Round Bodied & 1/2 Circle Taper Cutting	140 cm		OS 2346DA		
 40 mm Heavy	1/2 Circle Round Bodied	45cm			OS 2347S	
		70 cm			OS 2359	
		90 cm	OS 2357		OS 2347	
		115 cm			OS 2347+	
 40 mm Heavy 40 mm Heavy Double Needle-Heavy	½ Circle taper cutting and ½ circle Round Bodied	140 cms			OS 2347DA	
		160 cms			OS 2160	
		180 cms			OS 2180	
 40 mm	1/2 Circle Reverse Cutting	45 cm	OS 2382S			
		90 cm	OS 2382			OS 2351
 40 mm	1/2 Circle Taper cutting	90 cm		OS 2518		
 40 mm OS	1/2 Circle Reverse cutting	90 cm			OS 2421	
 50 mm Heavy	1/2 Circle Round Bodied	100 cm			OS 2448+	

ORYL MONO / ORICRYL MONO (Poliglecaprone 25) suture is a monofilament synthetic absorbable surgical suture prepared from a copolymer of glycolide and epsilon-caprolactone. Poliglecaprone 25 copolymer has been found to be non antigenic, non pyrogenic and elicits only a slight tissue reaction during absorption

<b>Type</b>	: Monofilament
<b>Material</b>	: Poliglecaprone 25, a copolymer made of 75% glycolide and 25% Caprolactone
<b>Color</b>	: Violet
<b>Tissue reaction</b>	: Minimal
<b>Absorption</b>	: The hydrolytic action by which the material is broken down results in total absorption in approximately 90 to 120 days. Approximately 60% of tensile strength remains after 7 days.
<b>Tensile Strength</b>	: 50% tensile strength is retained for 14 days.
<b>USP Range</b>	: 4/0 – 2
<b>Sterilization</b>	: EO (Ethylene Oxide)
<b>Needle Type</b>	: Round bodied, cutting edge, taper point, straight, blunt point
<b>Packing</b>	: In aluminium foil packages with or without needle

### CHARACTERISTICS

- ☑ High tensile strength
- ☑ Synthetic
- ☑ Breaks down by hydrolysis
- ☑ Monofilament with microscopic uniform diameter
- ☑ Pliability and softness
- ☑ Hermetically sealed packing

### BENEFITS

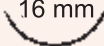
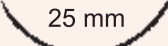
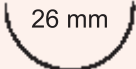
- Excellent tissue support
- Minimal tissue reaction
- Predictable absorption rate
- Soft passage through the tissues without sawing, tissue drag and trauma
- Absence of capillarity (no support of bacterial growth)
- Excellent knot tie down
- Good handling properties, Easy and secure knotting
- Guaranteed seal and product sterility

### INDICATIONS

Superficial soft tissue and/or ligation especially in General surgery, Skin closure, Plastic surgery, Gastrointestinal surgery, Gynaecology, Urology

### CONTRAINDICATIONS

- Cardiovascular surgery
- Neurosurgery
- Ophthalmic surgery
- Being absorbable not to use when an extended wound support is required

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP		
			4-0	3-0	2-0
 16 mm	3/8 Circle Reverse Cutting Prime Needle	70 cm	OS 1205		
 25 mm	3/8 Circle Reverse Cutting Prime Needle	70 cm		OS 1326	
 26 mm	1/2 Circle Oval Round Bodied	70 cm		OS 1664	OS 1665

## Synthetic Absorbable Surgical Suture

**ORYL PD MONO / ORICRYL PDS MONO (Polydioxanone)** monofilament synthetic absorbable suture is prepared from the polyester, poly (p-dioxanone).

Two important characteristics describe the in vivo performance of absorbable sutures first tensile strength retention and second the absorption rate (loss of mass). This synthetic absorbable suture has been formulated to minimize the variability of these characteristics and to provide wound support through an extended Healing period.

<b>Type</b>	: Monofilament
<b>Material</b>	: Polyester poly (p-dioxanone)
<b>Color</b>	: Violet
<b>Tissue reaction</b>	: Minimal
<b>Absorption</b>	: The hydrolytic action by which the material is broken down results in total absorption in approximately 180 to 210 days. Approximately 50% of tensile strength remains after 42 days.
<b>Tensile Strength</b>	: 50% tensile strength is retained for 14 days.
<b>USP Range</b>	: 4/0 – 2
<b>Sterilization</b>	: EO (Ethylene Oxide)
<b>Needle Type</b>	: Round bodied, cutting edge, taper point, straight, blunt point
<b>Packing</b>	: In aluminium foil packages with or without needle

### CHARACTERISTICS

- High tensile strength
- Synthetic
- Breaks down by hydrolysis
- Monofilament with microscopic uniform diameter
- Pliability and softness
- Hermetically sealed packing

### BENEFITS






- Outstanding strength retention for extended wound support
- Minimal tissue reaction
- Predictable absorption rate
- Soft passage through the tissues without sawing, tissue drag and trauma  
Absence of capillarity (no support of bacterial growth)  
Excellent knot tie down
- Good handling properties, Easy and secure knotting
- Guaranteed seal and product sterility

### INDICATIONS

General soft tissue closing especially in General surgery, Gastrointestinal surgery, Ophthalmic surgery, Orthopaedics, Abdominal wall closure, Gynaecology, Plastic surgery, Urology

### CONTRAINDICATIONS

- Cardiovascular surgery
- Neurosurgery
- Prosthetic devices
- Being absorbable not to use when wound support for more than 6 weeks is required.

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP		
			3.0	1-0	1
 20 mm	1/2 Circle Round Bodied	70 cm	OS 9237		
 30 mm Heavy	1/2 Circle Round Bodied	70 cm		OS 9254	
 40 mm Heavy	1/2 Circle Round Bodied	90 cm		OS 9371	OS 9248
 50 mm Heavy	1/2 Circle Round Bodied	150 cm			OS 9262
 50 mm Heavy	1/2 Circle Reverse Cutting	90 cm Loop			OS 9374



**ORIGUT (Plain Catgut)** is a fast absorbing surgical gut suture made from strand of collagenous material prepared from the sub mucosal layers of the small intestine of healthy sheep. Fast absorbing surgical gut sutures are sterile and elicit only a slight to minimal tissue reaction during absorption

<b>Type</b>	: Twisted multifilament with a monofilament appearance
<b>Material</b>	: None
<b>Color</b>	: Beige
<b>Tissue reaction</b>	: Moderate. Plain catgut enjoys lower tissue reaction
<b>Absorption</b>	: By phagocytosis. Complete mass absorption in approximately 65 days. Approximately 50% of tensile strength remains after 7 days. When used in infected tissues or in tissues with increased levels of proteolytic enzymes (stomach, cervix, and vagina) it is more quickly absorbed.
<b>Tensile Strength</b>	: Tensile strength is retained for 7 - 14 days.
<b>USP Range</b>	: 5/0 – 3
<b>Sterilization</b>	: EO (Ethylene Oxide)
<b>Needle Type</b>	: Round bodied, cutting edge, taper point, straight, blunt point
<b>Packing</b>	: In aluminium foil packages with or without needle

### CHARACTERISTICS

- High tensile strength
- Absorption by phagocytosis
- Twisted structure
  
- Uniform diameter by centerless polishing (monofilament appearance)
- Hermetically sealed packing

### BENEFITS

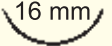
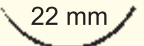

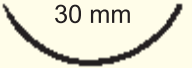
- Excellent tissue support
- Uniform absorption
- Excellent handling properties, High flexibility  
High tensile strength, Excellent knot security
- Soft passage through the tissues without sawing, tissue drag and trauma.  
Excellent knot tie down
- Guaranteed seal and product sterility

### INDICATIONS

General soft tissue closing and/or ligation especially in General surgery, Gastrointestinal surgery, Gynaecology, Obstetrics, Urology, Ophthalmic surgery

### CONTRAINDICATIONS

- Cardiovascular surgery, Neurosurgery
- Being absorbable not to use when an extended wound support is required.
- Caution in patients with delayed wound healing (e.g. compromised immune system).
- In the region of infected wounds known sensitivities or allergies to Collagen

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP			
			4-0(2)	3-0(3)	2-0(3.5)	1-0(4)
16 mm 	3/8 Circle Cutting	76 cm	OS 4270			
22 mm 	3/8 Circle Cutting	76 cm		OS 5010		
30 mm 	1/2 Round Bodied	76 cm				OS 4342
30 mm 	3/8 Circle Round Bodied	76 cm			OS 5033	

### PRECUT SUTURES (NON NEEDED)

SUTURE LENGTH	PACKAGING	SUTURE SIZE IN USP	
		2-0(3.5)	1-0(4)
1 x 152 cm	Catgut plain-in sterile foil over wrap pack 152 Cms. Box of 12's pack	OS 2003	OS 2004

**ORICHROME (Chromic Catgut)** is an absorbable, sterile surgical suture composed of purified connective tissue (mostly collagen)

Derived from the sub mucosal fibrous layer of healthy sheep intestines. Strands of purified collagen taken from the Serosal layer of selected bovines, tanned with chrome salts to provide Greater resistance to absorption.

<b>Type</b>	: Twisted multifilament with a monofilament appearance
<b>Material</b>	: None
<b>Color</b>	: Dark brown
<b>Tissue reaction</b>	: Moderate.
<b>Absorption</b>	: By phagocytosis. The rate of absorption is slowed down by chromizing. Complete mass absorption in approximately 90 days. Approximately 50% of tensile strength remains after 14 days. When used in infected tissues or in tissues with increased levels of proteolytic Enzymes (stomach, cervix, vagina) it is more quickly absorbed.
<b>Tensile Strength</b>	: Tensile strength is retained for 14 - 21 days.
<b>USP Range</b>	: 5/0 – 3
<b>Sterilization</b>	: EO (Ethylene Oxide)
<b>Needle Type</b>	: Round bodied, cutting edge, taper point, straight, blunt point
<b>Packing</b>	: In aluminium foil packages with or without needle

### CHARACTERISTICS

- ☑ High tensile strength
- ☑ Absorption by phagocytosis
- ☑ Twisted structure
  
- ☑ Uniform diameter by centerless polishing (monofilament appearance)
- ☑ Hermetically sealed packing

### BENEFITS






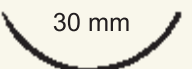


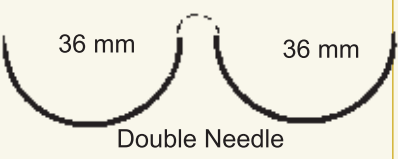

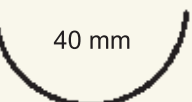
- Excellent tissue support
- Uniform absorption
- Excellent handling properties, High flexibility  
High tensile strength, Excellent knot security
- Soft passage through the tissues without sawing, tissue drag and trauma.  
Excellent knot tie down
- Guaranteed seal and product sterility



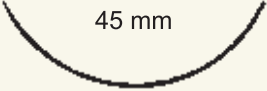


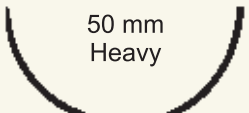
### INDICATIONS

General soft tissue closing and/or ligation especially in General surgery, Gastrointestinal surgery, Gynaecology, Obstetrics, Urology, Ophthalmic surgery

### CONTRAINDICATIONS

- Cardiovascular surgery, Neurosurgery
- Being absorbable not to use when an extended wound support is required.
- Caution in patients with delayed wound healing (e.g. compromised immune system).
- In the region of infected wounds Known sensitivities or allergies to collagen or chromium

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP			
			4-0(2)	3-0(3)	2-0(3.5)	1-0(4)
 12 mm	1/2 Circle Reverse Cutting	76 cm		OS 4272		
 16 mm	3/8 Circle Round Bodied	76 cm	OS 5048			
 16 mm	3/8 Circle Cutting	76 cm	OS 4280	OS 4274		
 20 mm	1/2 Circle Round Bodied	76 cm		OS 4237		
 22 mm	3/8 Circle Cutting	76 cm		OS 4201		
 30 mm	3/8 Circle Round Bodied	76 cm			OS 4216	OS 4217
 30 mm	1/2 Circle Round Bodied	76 cm			OS 4241	OS 4242
 30 mm Heavy	1/2 Circle Round Bodied	76 cm				OS 4254
 36 mm 36 mm Double Needle	1/2 Circle Round Bodied & 1/2 Circle Reverse Cutting	152 cm			OS 4277	
 40 mm	3/8 Circle Round Bodied	76 cm			OS 4220	OS 4221
 40 mm	1/2 Circle Round Bodied	76 cm			OS 4245	OS 4246

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP			
			2-0(3.5)	1-0(4)	1(5)	2(6)
 40 mm Heavy	1/2 Circle Round Bodied	76 cm		OS 4258	OS 4259	
 40 mm Heavy	1/2 Circle Taper Cutting	100 cm		OS 4279		
 45 mm	3/8 Circle Round Bodied	76 cm			OS 4226	
 45 mm Double Needle	1/2 Circle Round Bodied & 1/2 Circle Reverse Cutting	152 cm		OS 4276	OS 4275	
 45 mm Heavy	1/2 Circle Round Bodied	100 cm		OS 4229	OS 4227	OS 4228
 50 mm Heavy	1/2 Circle Round Bodied	100 cm			OS 4248	

### PRECUT SUTURES (NON NEEDED)

SUTURE LENGTH	PACKING	SUTURE SIZE IN USP				
		3-0(3)	2-0(3.5)	1-0(4)	1(5)	2(6)
1 x 152 cm	Catgut chromic-in sterile foil over wrap. pack 152 Cms. box of 12's pack	OS 2212	OS 2213	OS 2214	OS 2215	OS 2216

## Synthetic Non Absorbable Surgical Suture

**SYNTHALIN / ORILENE (Polypropylene Sutures)** (clear or pigmented) are non-absorbable, sterile surgical suture composed of an isotactic crystalline stereoisomer of polypropylene, a synthetic linear polyolefin. The suture is pigment blue to enhance visibility.

SYNTHALIN Polypropylene Sutures are indicated for use in general soft tissue approximating and/or ligation, including use in cardiovascular, ophthalmic procedures, and neurological procedures.

<b>Type</b>	: Monofilament
<b>Material</b>	: Polypropylene, a polymer of propylene
<b>Color</b>	: Blue
<b>Tissue reaction</b>	: Minimal
<b>Absorption</b>	: Non absorbable
<b>Tensile Strength</b>	: Excellent tensile strength, Excellent knot tying, Minimum tissue reaction
<b>USP Range</b>	: 10/0 – 2
<b>Sterilization</b>	: EO (Ethylene Oxide)
<b>Needle Type</b>	: Round bodied, cutting edge, taper point, straight, blunt point
<b>Packing</b>	: In aluminium foil packages/ Medical Grade ETO Pouches with or without needle

### CHARACTERISTICS

- ✓ High tensile strength, non absorbable
- ✓ Resistance to repeated bending
- ✓ Synthetic
- ✓ Monofilament with microscopic Uniform diameter
- ✓ Pliability and softness
- ✓ Hermetically sealed packing

### BENEFITS





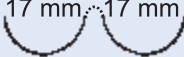

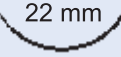
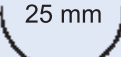

- Excellent and permanent tissue support
- Use in cardiovascular surgery (heart prosthesis or vascular anastomosis)
- Minimal tissue reaction
- Soft passage through the tissues without sawing, tissue drag and trauma.  
Absence of capillarity (no support of bacterial growth)  
Excellent knot tie down
- Good handling properties, Easy and secure knotting
- Guaranteed seal and product sterility


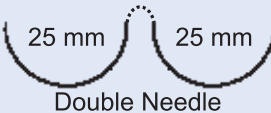
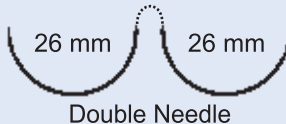




### INDICATIONS

General soft tissue closing and/or ligation especially in General surgery, Gastrointestinal surgery, Gynaecology, Obstetrics, Urology, Ophthalmic surgery

### CONTRAINDICATIONS

- Cardiovascular surgery, Neurosurgery
- Being absorbable not to use when an extended wound support is required.
- Caution in patients with delayed wound healing (e.g. compromised immune system).
- In the region of infected wounds Known sensitivities or allergies to collagen or chromium

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP				
			6-0(0.7)	5-0(1)	4-0(1.5)	3-0(2)	2-0(3)
 12 mm	3/8 Circle Reverse Cutting	45 cm	OS 878				
		70 cm		OS 880			
 16 mm	3/8 Circle Round Bodied	70 cm		OS 881			
 16 mm	3/8 Circle Cutting	70 cm			OS 870		
 16 mm	1/2 Circle Round Bodied	70 cm			OS 849		
 17 mm • 17 mm Double Needle	1/2 Circle Taper cutting	70 cm			OS 835		
 20 mm	1/2 Circle Round Bodied	70 cm				OS 887	
 22 mm	3/8 Circle Cutting	80 cm				OS 018	OS 017
 25 mm	1/2 Circle Round Bodied	90 cm				OS 825	
 25 mm • 25 mm Double Needle	1/2 Circle Round Bodied	70 cm				OS 882	

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP		
			2-0(3)	1-0(3.5)	1(4)
 25 mm	1/2 Circle Taper cutting	70 cm		OS 805	
 25 mm 25 mm Double Needle	1/2 Circle Taper Cutting	90 cm	OS 877		
 26 mm 26 mm Double Needle	1/2 Circle Round Bodied	90 cm		OS 824	
 30 mm	1/2 Circle Round Bodied	90 cm	OS 841	OS 842	
 30 mm Heavy	1/2 Circle Round Bodied	90 cm		OS 830	OS 840
 40 mm Heavy	1/2 Circle Round Bodied	100 cm			OS 843
 45 mm Heavy	1/2 Circle Reverse Cutting	100 cm			OS 883



**DURASIL / ORISILK (Black Braided Silk Suture)** is a non absorbable, sterile, surgical suture composed of an organic protein called fibroin. This protein is derived from the domesticated species *Bombyx mori* (B. More) of the family *Bombycidae*. These are processed to remove the natural waxes and gums. DURASIL suture is dyed black and coated with a special wax mixture.

Durasil is indicated for use in general soft tissue approximation and/or ligation, including use in Cardiovascular, ophthalmic and neurological procedures.

<b>Type</b>	: Black Braided multifilament.
<b>Material</b>	: Braided fibres from the cocoon of the silkworm coated with Wax silicone.
<b>Color</b>	: Black
<b>Tissue reaction</b>	: Moderate
<b>Absorption</b>	: Silk suture elicits an initial inflammatory reaction in tissues, which is followed by Gradual encapsulation of the suture by fibrous connective tissues.
<b>Tensile Strength</b>	: Excellent tensile strength, Excellent knot tying, Minimum tissue reaction
<b>USP Range</b>	: 7/0 – 4
<b>Sterilization</b>	: EO (Ethylene Oxide)
<b>Needle Type</b>	: Round bodied, cutting edge, taper point, straight, blunt point
<b>Packing</b>	: In aluminium foil packages/Medical Grade ETO Pouches with or without needle

### CHARACTERISTICS

- High tensile strength, non absorbable
- Braided or twisted structure
- Coated multifilament
- Hermetically sealed packing

### BENEFITS









- Good and extended tissue support for up to 3 month
- Excellent handling properties, High flexibility  
High tensile strength, Excellent knot security
- Soft passage through the tissues with minimal sawing, tissue drag and trauma. Good knot tie down / adjustability  
Reduced capillary action
- Guaranteed seal and product sterility



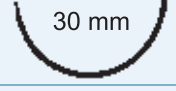


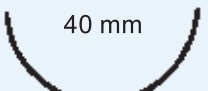
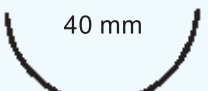
### INDICATIONS

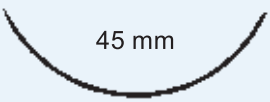
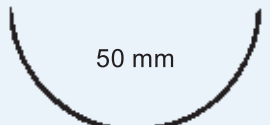
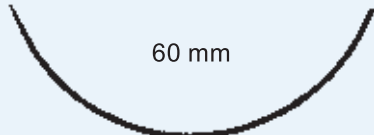
General soft tissue closing and/or ligation especially in General surgery, Skin closure, Ophthalmic surgery  
Oral surgery, Gastrointestinal surgery, Gynaecology, Obstetrics.

### CONTRAINDICATIONS

- Urinary tract, Biliary tract
- Known allergies or sensitivities to silk

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP			
			5-0(1)	4-0(1.5)	3-0(2)	2-0(3)
 12 mm	3/8 Circle Reverse Cutting	76 cm	OS 5080			
 16 mm	3/8 Circle Cutting	76 cm		OS 5001	OS 5002	
 16 mm	3/8 Circle round bodied	76 cm	OS 5081	OS 5082		
 16 mm	1/2 Circle Round Bodied	76 cm		OS 5049		
 20 mm	1/2 Circle Round Bodied	76 cm		OS 5086	OS 5087	
 25 mm	1/2 Circle Round Bodied	76 cm			OS 5070	
 25 mm	1/2 Circle Taper Cutting	76 cm				OS 5670
 26 mm	3/8 Circle Reverse Cutting	76 cm			OS 5028	OS 5029

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP			
			2-0(3)	1-0(3.5)	1(4)	2(5)
 30 mm Heavy	1/2 Circle cutting	76 cm	OS 5072			
 30 mm	1/2 Circle cutting	76 cm		OS 5077		
 30 mm	1/2 Circle Round Bodied	76 cm	OS 5333	OS 5334		
		90 cm	OS 5331			
 36 mm	3/8 Circle cutting	76 cm	OS 5362	OS 5360	OS 5361	
 40 mm	1/2 Circle cutting	76 cm		OS 5064		
 40 mm	1/2 Circle reverse cutting	76 cm	OS 5067	OS 5068	OS 5069	
 40 mm	1/2 Circle Round Bodied	76 cm		OS 5075	OS 5063	OS 5073

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP		
			2-0(3)	1-0(3.5)	1(4)
 <p>45 mm</p>	3/8 Circle Reverse Cutting	76 cm	OS 5036		
		90 cm		OS 5037	
 <p>50 mm</p>	1/2 Circle Reverse Cutting	76 cm	OS 5052		
 <p>60 mm</p>	3/8 Circle Cutting	76 cm			OS 5062

## PRECUT SUTURES (NON NEEDED)

SUTURE LENGTH	PACKING	SUTURE SIZE IN USP			
		3-0(2)	2-0(3)	1-0(3.5)	1(4)
2 x 75 cm	Sterilised black braided silk in sterile foil over wrap. 2 x 75 cm box of 12's pack.	OS 212	OS 213	OS 214	OS 215

## SILK REELS

SUTURE LENGTH 25 METERS	PACKING	SUTURE SIZE IN USP			
		3-0(2)	2-0(3)	1-0(3.5)	1(4)
6 Reels in a Box Non sterile	Surgical black braided 6 reels x 25 meters. (Non-sterile)	OS 822	OS 823	OS 824	OS 825

**DURASIL / ORISILK (Virgin Silk) suture** is a non absorbable, sterile, surgical Made from filaments of silk fibre which are held together by natural gum secreted by the silk worm.

Durasil is indicated for use in general soft tissue approximation and/or ligation, including use in Cardiovascular, ophthalmic and neurological procedures.

<b>Type</b>	: Twisted multifilament.
<b>Material</b>	: Twisted fibres from the cocoon of the silkworm
<b>Color</b>	: Blue
<b>Tissue reaction</b>	: Moderate
<b>Absorption</b>	: Silk suture elicits an initial inflammatory reaction in tissues, which is followed by Gradual encapsulation of the suture by fibrous connective tissues.
<b>Tensile Strength</b>	: Excellent tensile strength, Excellent knot tying, Minimum tissue reaction
<b>USP Range</b>	: 10-0 to 8-0
<b>Sterilization</b>	: EO (Ethylene Oxide)
<b>Needle Type</b>	: Round bodied, cutting edge, taper point, straight, blunt point
<b>Packing</b>	: In aluminium foil packages/ Medical Grade ETO Pouches with or without needle

### CHARACTERISTICS

- High tensile strength, non absorbable
- Braided or twisted structure
- Coated multifilament
- Hermetically sealed packing

### BENEFITS

- Good and extended tissue support for up to 3 month
- Excellent handling properties, High flexibility  
High tensile strength, Excellent knot security
- Soft passage through the tissues with minimal sawing, tissue drag and trauma. Good knot tie down / adjustability  
Reduced capillary action
- Guaranteed seal and product sterility

### INDICATIONS

General soft tissue closing and/or ligation especially in General surgery, Skin closure, Ophthalmic surgery  
Oral surgery, Gastrointestinal surgery, Gynaecology, Obstetrics.

### CONTRAINDICATIONS

- Urinary tract, Biliary tract
- Known allergies or sensitivities to silk

## Synthetic Non Absorbable Surgical Suture

**NEOBOND (Polyester Suture)** is a non absorbable, braided, sterile, surgical suture composed of Poly (ethylene terephthalate). It is prepared from fibers of high molecular weight, long-chain, linear polyesters having recurrent aromatic rings as an integral component. The suture is uniformly coated with polybutylate or poly {oxy-1, 4 butanediyl oxy (1, 6-dioxo-1, 6 hexanediyl)}. The highly adherent coating is a relatively nonreactive non absorbable compound which acts as a lubricant to mechanically improve the physical properties of the uncoated suture by improving handling qualities as contrasted to the braided, uncoated fiber. NEOBOND Suture is braided for optimal handling properties, and dyed green for enhanced visibility.

<b>Type</b>	: Braided multifilament
<b>Material</b>	: Polyester - a polymer of polyethylene terephthalate coated with Silicone, Teflon
<b>Color</b>	: Green
<b>Tissue reaction</b>	: Minimal
<b>Absorption</b>	: Non absorbable, gradually encapsulated by connective tissue
<b>Tensile Strength</b>	: Excellent tensile strength, Excellent knot tying, Minimum tissue reaction
<b>USP Range</b>	: 5/0 – 5
<b>Sterilization</b>	: EO (Ethylene Oxide)
<b>Needle Type</b>	: Round bodied, cutting edge, taper point, straight, blunt point
<b>Packing</b>	: In aluminium foil packages/ Medical Grade ETO Pouches with or without needle

### CHARACTERISTICS

- Unsurpassed tensile strength, non absorbable
- Resistance to repeated bending
- Synthetic
- Braided structure
  
- Coated multifilament
  
- Hermetically sealed packing

### BENEFITS

- Excellent and permanent tissue support
  
- Use in cardiovascular surgery (heart prosthesis)
- Minimal tissue reaction
- Excellent handling properties, High flexibility, High tensile strength. Excellent knot security
- Soft passage through the tissues with minimal sawing, tissue drag and trauma. Good knot tie down / adjustability. Reduced capillary action
  
- Guaranteed seal and product sterility

### INDICATIONS

General soft tissue closing and/or ligation especially in General surgery, Skin closure, Ophthalmic surgery  
Oral surgery, Gastrointestinal surgery, Gynaecology, Obstetrics.

**ORLON (Nylon/Polyamide) Suture** is non absorbable, sterile surgical monofilament suture composed of the long-chain aliphatic polymers Nylon 6 and Nylon 6, 6. This Suture is dyed black / blue or green to enhance visibility in tissue

It is mostly used in ophthalmic and neurological procedures

<b>Type</b>	: Monofilament
<b>Material</b>	: Extrusion of polyamide 6.0 or 6.6
<b>Color</b>	: Black / Green
<b>Tissue reaction</b>	: Minimal
<b>Absorption</b>	: Non absorbable, gradually encapsulated by connective tissue. The thread mass Diminishes, approximately 10% a year by rupture of chemical links (hydrolytic action).
<b>Tensile Strength</b>	: Excellent tensile strength, Excellent knot tying, Minimum tissue reaction
<b>USP Range</b>	: 10/0 – 2
<b>Sterilization</b>	: EO (Ethylene Oxide)
<b>Needle Type</b>	: Round bodied, cutting edge, taper point, straight, blunt point

### CHARACTERISTICS

- ☑ High tensile strength, non absorbable
- ☑ Synthetic
- ☑ Monofilament with microscopic uniform diameter
- ☑ Pliability and softness
- ☑ Hermetically sealed packing

### BENEFITS

- Excellent and permanent tissue support
- Minimal tissue reaction
- Soft passage through the tissues without sawing, tissue drag and trauma. Absence of capillarity (no support of bacterial growth)
- Excellent knot tie down
- Good handling properties
- Easy and secure knotting
- Guaranteed seal and product sterility

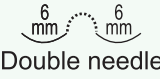



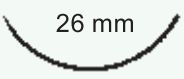
### INDICATIONS





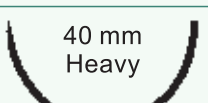
General soft tissue closing and/or ligation

Blue :- especially in Skin closure, General surgery, Plastic surgery, Gastrointestinal surgery, Gynaecology  
Obstetrics, Orthopaedics

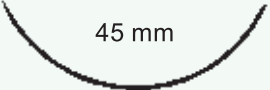




Black :- especially in Plastic surgery, Ophthalmic surgery

## Synthetic Non Absorbable Surgical Suture

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP					
			10-0	6-0(0.7)	5-0(1)	4-0(1.5)	3-0(2)	2-0(3)
 6 mm 6 mm Double needle	3/8 Circle spatulated micro point	38 cm	OS 3719					
 10 mm	3/8 Circle Reverse Cutting	70 cm		OS 3320				
 12 mm	3/8 Circle Reverse Cutting	70 cm			OS 3317			
 16 mm	3/8 Circle Cutting	35 cm			OS 3315			
		70 cm				OS 3318	OS 3321	
 26 mm	3/8 Circle Reverse Cutting	100 cm					OS 3328	OS 3329
		45 cm					OS 3328S	OS 3329S

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP		
			2-0(3)	1-0(3.5)	1(4)
 36 mm	3/8 Circle Cutting	100 cm	OS 3236	OS 3239	
 40 mm	1/2 Circle Reverse cutting	100 cm		OS 3337	
		45 cm		OS 3337S	
 40 mm	1/2 Circle Round Bodied	150 cm (Loop)		OS 3340	
 40 mm Heavy	1/2 Circle Reverse cutting	100 cm		OS 3339	
 40 mm Heavy	1/2 Circle Round Bodied	100 cm		OS 3346	OS 3347

## Synthetic Non Absorbable Surgical Suture

NEEDLE LENGTH	NEEDLE DESCRIPTION	SUTURE LENGTH	SUTURE SIZE IN USP		
			2-0(3)	1-0(3.5)	1(4)
 <p>45 mm</p>	3/8 Circle Reverse Cutting	45 cm	OS 3336S		
		100 cm	OS 3336	OS 3335	OS 3334
 <p>45 mm Heavy</p>	1/2 Circle Reverse Cutting	100 cm			OS 3338
 <p>50 mm Heavy</p>	1/2 Circle Round Bodied	150 cm (Loop)			OS 3348
 <p>60 mm</p>	Straight Cutting	70 cm	OS 3390	OS 3389	
 <p>90 mm</p>	3/8 Circle Cutting	100 cm			OS 3397

## PRE-CUT SUTURES

SUTURE LENGTH	PACKAGING	SUTURE SIZE IN USP		
		2-0(3)	1-0(3.5)	1(4)
5 x 35 cm	Sterilised Monofilament in sterilised foil over wrap. 5 x 35 cm box of 12's pack	OS 703	OS 704	OS 705
2 x 76 cm	Sterilised Monofilament in sterilised foil over wrap. 2 x 76 cm box of 12's pack	OS 903	OS 904	OS 905



**ORISTEEL(Surgical stainless steel) suture** is a non absorbable, sterile surgical suture composed of 316L stainless steel conforming to ASTM Standard F138 Grade 2 Stainless Steel bar and wire for surgical implants. Steel sutures meet all requirements established by the United States Pharmacopeia (USP) and for non absorbable surgical sutures. The sutures are available as a monofilament and multifilament suture

- Type** : Monofilament
- Material** : Iron, nickel and chromium alloy
- Color** : Metal
- Tissue reaction** : Minimal
- Absorption** : Non absorbable
- Tensile Strength** : Excellent tensile strength, Excellent knot tying, Minimum tissue reaction
- USP Range** : 7 - 5/0
- Sterilization** : EO (Ethylene Oxide)
- Needle Type** : Round bodied, cutting edge, taper point, straight, blunt point
- Packing** : In Medical Grade ETO Pouches with needle

### CHARACTERISTICS

- High tensile strength, non absorbable
- Synthetic
- Ductile and malleable
- Monofilament with microscopic uniform diameter
- Hermetically sealed packing

### BENEFITS







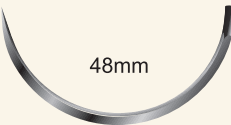



- Excellent and permanent tissue support
- Minimal tissue reaction
- Good handling properties
- Soft passage through the tissues without sawing, tissue drag and trauma
- Absence of capillarity (no support of bacterial growth)
- Excellent knot tie down
- Guaranteed seal and product sterility

### INDICATIONS

Closure of sternum, Orthopaedics, Abdominal wall closure and hernia repair

### CONTRAINDICATIONS

Known sensitivities or allergies to stainless or metals such as chromium and nickel

NEEDLE LENGTH	NEEDLE DESCRIPTION	CUT	SUTURE LENGTH	SUTURE SIZE IN USP				
				1	2	5	6	7
 40 mm	1/2 Circle Blunt Point Round Bodied		4 x 45 cm	OS 661	OS 662			
 40 mm	1/2 Circle Taper Cutting		4 x 45 cm	OS 660	OS 650			
 45 mm	1/2 Circle Blunt Point Round Bodied		4 x 45 cm			OS 651	OS 649	
			2 x 75 cm				OS 645	
 48mm	1/2 Circle Conventional Cutting		4 x 45 cm			OS 653	OS 654	OS 657
			2 x 75 cm			OS 646	OS 644	
 48mm	1/2 Circle Blunt Point Round Bodied		2 x 75 cm			OS 643		

Checking the diameter & uniformity of sutures



Needle crimping on a pneumatically operated crimping machine where eyeless needles are attached to individual suture strands



Needle inspection under illuminated magnifying glass  
Checking minute defects



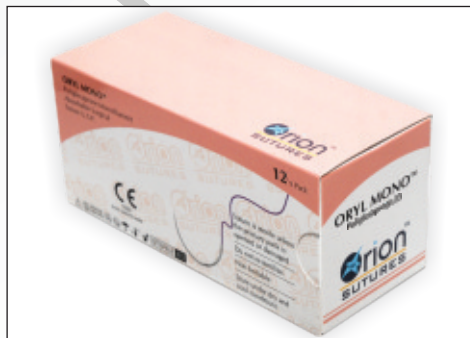
Microbiology Laboratory-Inhouse Sterility Testing

## *Quality Assurance*

Our Quality Assurance Laboratory adopts modern analytical techniques. Rigorous control and strict adherence to quality specifications have enabled us to ensure guaranteed reliability of our products. Raw materials used in manufacturing go through strict testing procedures to produce monitored continuously and post marketing surveillance is conducted on random batches to assess the performance of the products after dispatch.

## **SURGEON'S KNOT SECURITY**





## **Orion Sutures (India) Pvt. Ltd.**

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