VMG Vitrex Medical Group

Dental Sutures

State of the art

CHIRMAX surgical
by Vitrex Medical Group

Elevating Dental Surgery: Precision Sutures for Superior Outcomes

Dental surgery is a sophisticated discipline that bridges the gap between traditional oral care and advanced surgical medicine. While often associated with extractions, its true scope is far broader-encompassing complex procedures **like bone grafting, implant placement, and corrective jaw surgery**. In these high-stakes environments, the choice of suture is critical. Although techniques have evolved, the fundamental principle remains unchanged: to safely and precisely re-approximate wound edges under minimal tension to support hemostasis, promote primary intention healing, and minimize hard-tissue loss.

A Legacy of Manufacturing Excellence

With more than **90 years of experience** in manufacturing surgical sutures, our team understands the specific needs of medical professionals.

Our current range consists of more than 1,500 individual suture products, offering comprehensive solutions for every clinical scenario:

- **Diverse Material Selection:** A full portfolio of absorbable and non-absorbable materials.
- **Advanced Geometry:** Available in both, monofilament and braided threads.
- **Engineered Precision:** Needles designed for smooth penetration and minimal tissue trauma.

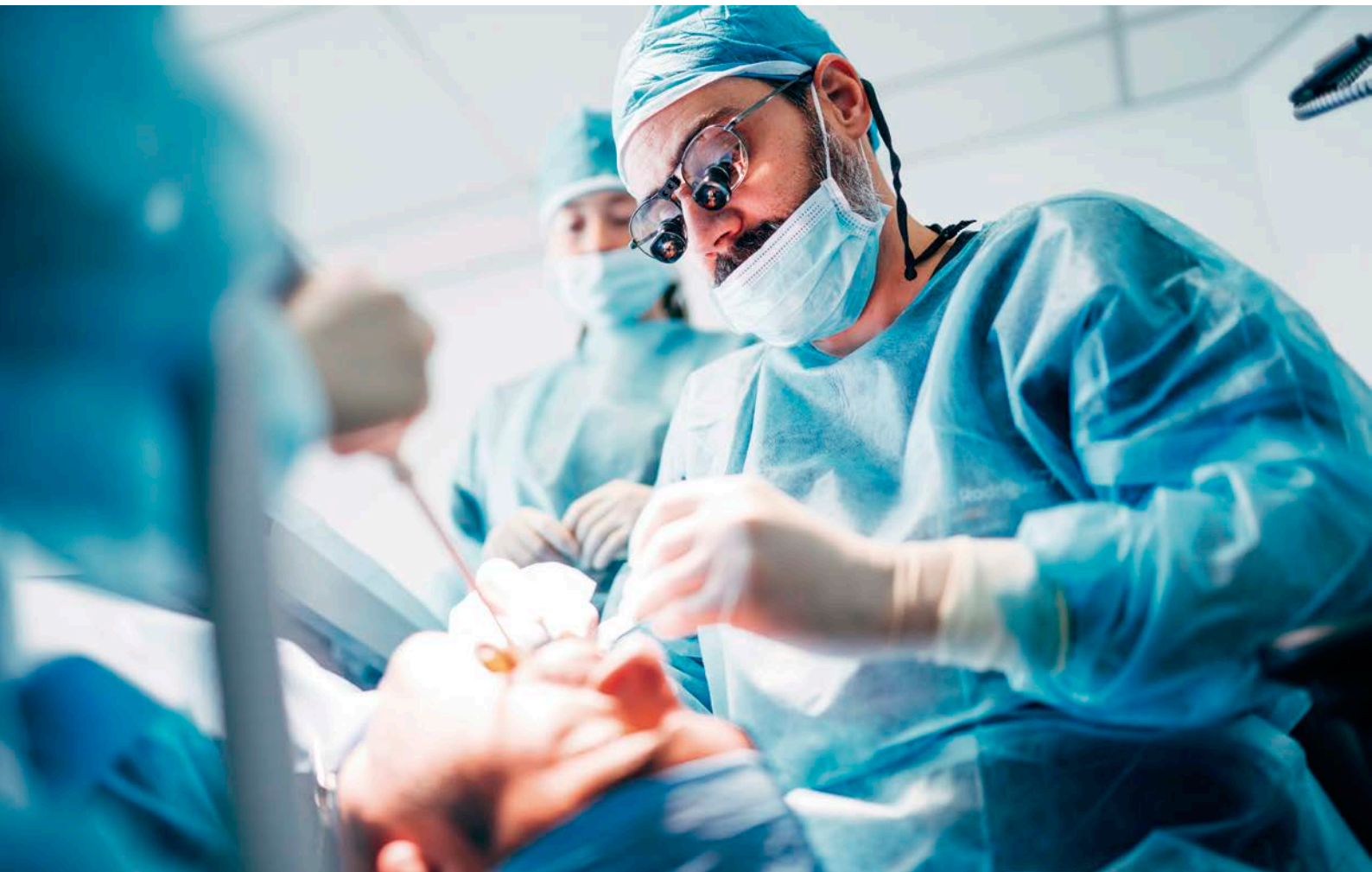
Quality Without Compromise

Our sutures are manufactured using state-of-the-art technology, where every individual process is subject to strict scientific quality control.

We prioritize the continuous monitoring of both mechanical and microbiological characteristics to ensure absolute reliability in the operating room.

- **Certified Standards:** Production is fully compliant with GMP guidelines.
- **Quality Management:** A comprehensive system in line with ISO 13485 has been implemented.
- **Proven Safety:** All products have been CE marked since 1999.

Elevate your practice with sutures designed to achieve optimal surgical outcomes and provide the highest level of care for your patients.



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Contents

Overview of Surgical Sutures

Surgical Sutures Product Range Page 4
Labelling and Packaging Page 6
Needle types Page 7

Surgical Sutures

Absorbable Sutures

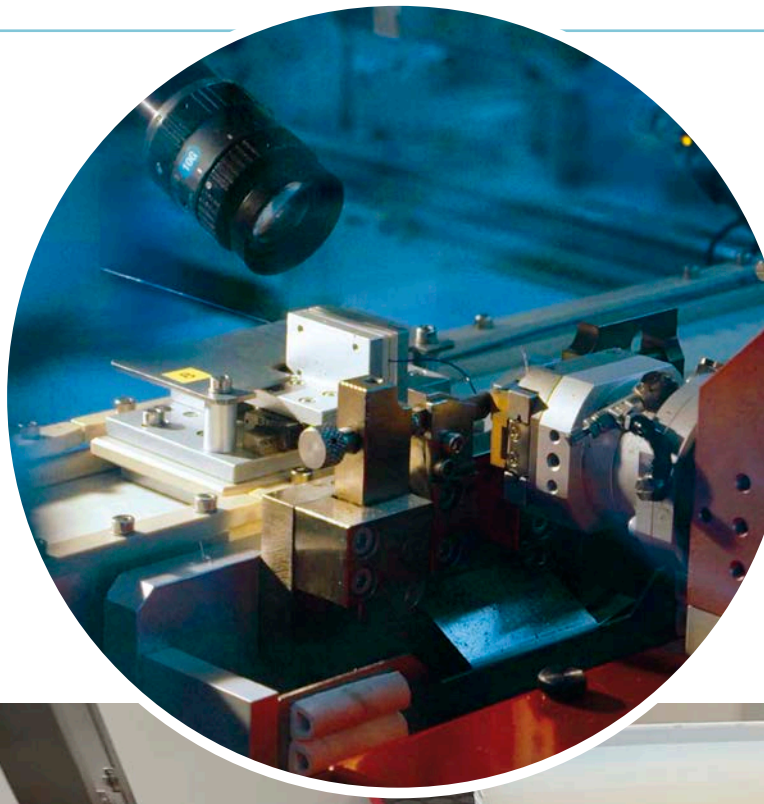
Chirasorb rapid braided Page 14
Chirlac rapid braided Page 16
Monolac monofilament Page 18
Chirasorb braided Page 20
Chirasorb Plus braided Page 22
Chirlac braided Page 24

Non-absorbable Sutures

Chiraflon monofilament Page 28
Chiralen monofilament Page 30
Silon monofilament Page 32
Tervalon braided Page 34
Silk braided Page 36

VMG Vitrex Medical Group Page 38

Manufacturing of Sutures



Precision in Every Stitch: Chirana T.Injecta Surgical Sutures Celebrating 90 Years of European Manufacturing Excellence

When it comes to oral surgery, the difference between "good healing" and "excellent recovery" lies in the quality of the closure. At the heart of Prague, Chirana T.Injecta brings together nearly a century of craftsmanship and cutting-edge 21st-century polymer science to create sutures expertly designed for the unique challenges of the oral cavity.

Why Choose Chirana T.Injecta for Your Practice?

Unrivaled Heritage: Building on the renowned Chirmax brand, our sutures are crafted with the expertise of a company that is one of the European market leaders since 1930.

Atraumatic Handling: Our precision-engineered needles glide through dense gingival tissue with minimal resistance, reducing tissue trauma and accelerating the healing process.

The Monofilament Advantage: With products such as Monolac and Chiraflon, we provide smooth, non-porous surfaces essential to prevent bacterial plaque accumulation—a critical factor in successful dental implantology and periodontology.

Engineered for Security: Exceptional knot stability ensures your flaps stay exactly where you place them, even in the moist, high-movement environment of the mouth.

Featured Selection for Oral Surgeons:

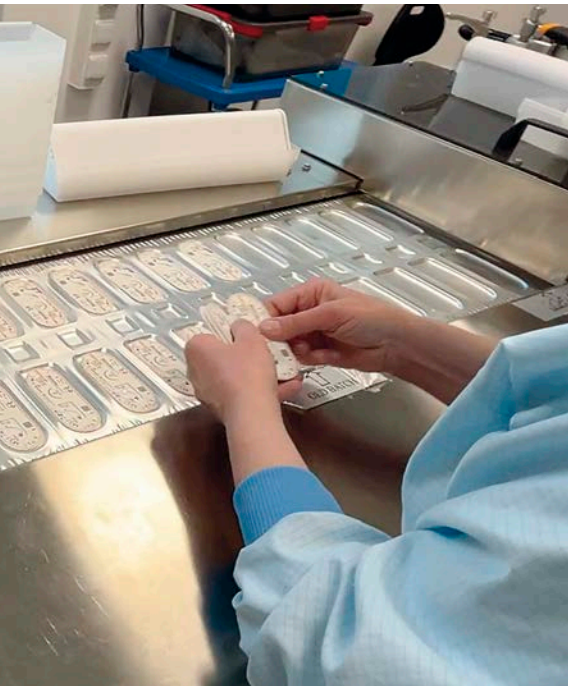
Chirlac Rapid and Chirasorb Rapid: The gold standard for mucosal closure. It's rapid absorption means one less follow-up appointment for your patient.

Chirasorb Plus: Infused with Chlorhexidine, this antibacterial suture provides an additional layer of protection during complex bone grafting and reconstructive procedures.

Upgrade your surgical kit with the reliability of Chirana T.Injecta - where Prague's engineering meets your clinical expertise.

At Chirana T.Injecta, quality is not just a goal - it is a measurable standard. Our manufacturing facility in Prague operates under the strictest international regulatory frameworks, ensuring that every suture meets the demanding requirements of modern dentistry.

Absorbable and Non-absorbable Sutures



In the dental field, the choice of suture material is as critical as the surgical technique itself. The primary distinction lies in how the body interacts with the material over time: whether it treats the suture as a temporary scaffold or a permanent fixture.

Absorbable Sutures

Absorbable sutures are designed to be broken down by the body's natural processes - either through enzymatic degradation or hydrolysis.

Primary Use: These are typically preferred for internal tissue layers or for patients where post-operative suture removal may be difficult or could cause unnecessary trauma to healing gingiva.

Synthetic: Polyglycolic acid (PGA) or Polyglactin 910 (Vicryl).

Key Advantage: They eliminate the need for a follow-up appointment specifically for suture removal, enhancing the patient's comfort.

Consideration: As they degrade, they can sometimes trigger a minor inflammatory response while the body works to dissolve the material.

Non-absorbable Sutures

Non-absorbable sutures are made of materials that are not metabolized by the body. They remain encapsulated in the tissue unless manually removed by a clinician.

Primary Use: These are the gold standard for procedures requiring long-term tensile strength, such as dental implants, bone grafting, or guided tissue regeneration (GTR).

Synthetic: Monofilaments like Polypropylene (Chiralen) or PVDF (Chiraflon), which are highly resistant to bacterial colonization.

Key Advantage: They provide superior strength and induce minimal tissue reaction, making them ideal for delicate esthetic areas where inflammation must be kept to an absolute minimum.

Consideration: They require a secondary "removal" appointment, usually 7 to 14 days post-surgery.

Clinical Decision Making

The choice between absorbable and non-absorbable sutures largely depends on the required duration of support. For sites that require support for only 5–7 days, such as a simple extraction site, absorbable sutures are efficient and patient-friendly. For wounds under tension or involving grafts that require several weeks of stability, non-absorbable monofilaments are the safer and more sterile option.

Surgical Sutures Product Range

Absorbable threads

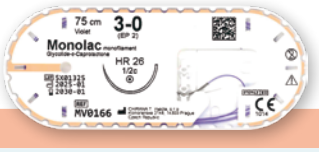
Chirasorb rapid braided

Composition	Colour	Range	Characteristics
Braided and coated suture made from 90% glycolide and 10% L-lactide	Violet and Natural	6/0 to 2 USP	Absorbable, multifilament, coated, synthetic, high tensile strength, reduced capillary effect, short-term healing

Chirlac rapid braided

Composition	Colour	Range	Characteristics
Braided and coated suture made of Polyglycolic acid (PGA)	Violet and Natural	6/0 to 4 USP	Absorbable, multifilament, coated, synthetic, high tensile strength, reduced capillary effect, short-term healing

Monolac monofilament

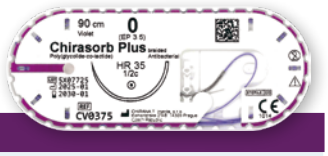


Composition	Colour	Range	Characteristics
Monofilament suture made of Glycolide and ε–caprolactone	Violet and Natural	6/0 to 2 USP	Absorbable, monofilament, synthetic, high tensile strength, excellent handling properties, mid-term healing

Chirasorb braided

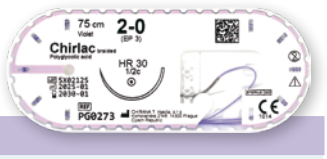
Composition	Colour	Range	Characteristics
Braided and coated suture made from 90% glycolide and 10% L-lactide	Violet and Natural	10/0 to 6 USP	Absorbable, multifilament, coated, synthetic, high tensile strength, reduced capillary effect, mid-term healing

Chirasorb Plus braided
Antibacterial



Composition	Colour	Range	Characteristics
Antibacterial, braided and coated suture made from 90% glycolide, 10% L-lactide and chlorhexidine diacetate	Violet and Natural	5/0 to 4 USP	Absorbable, multifilament, antibacterial coating, synthetic, high tensile strength, reduced capillary effect, mid-term healing

Chirlac braided



Composition	Colour	Range	Characteristics
Braided and coated suture made of Polyglycolic acid (PGA)	Violet and Natural	9/0 to 6 USP	Absorbable, multifilament, coated, synthetic, high tensile strength, reduced capillary effect, mid-term healing

Surgical Sutures Product Range

Non-absorbable threads

Chiraflon monofilament

Composition	Colour	Range	Characteristics
Monofilament suture made of Polyvinylidene Fluoride (PVDF) - similar to Teflon	Blue	8/0 to 3 USP	Non-absorbable, monofilament, synthetic, no capillary effect, very smooth, excellent knotting properties, easy to handle, physiologically inert

Chiralen monofilament

Composition	Colour	Range	Characteristics
Monofilament suture made of Polypropylene	Blue and Black	10/0 to 2 USP	Non-absorbable, monofilament, synthetic, no capillary effect, smooth, non-porous surface, suitable for stitches in infected wounds

Silon monofilament

Composition	Colour	Range	Characteristics
Monofilament suture made of Polyamide 6	Blue and Black	10/0 to 2 USP	Non-absorbable, monofilament, synthetic, very smooth, excellent knotting properties, easy to handle, loss of tensile strength after long-term implantation

Tervalon braided

Composition	Colour	Range	Characteristics
Braided and coated suture made of Polyester	Green and White	6/0 to 6 USP	Non-absorbable, multifilament, synthetic, high tensile strength, no capillary effect, well tolerated by the tissue, low friction

Silk braided

Composition	Colour	Range	Characteristics
Braided and coated suture made of Silk	Black	9/0 to 5 USP	Non-absorbable, multifilament, natural, no capillary effect, loss of tensile strength after long-term implantation

European Pharmacopoeia

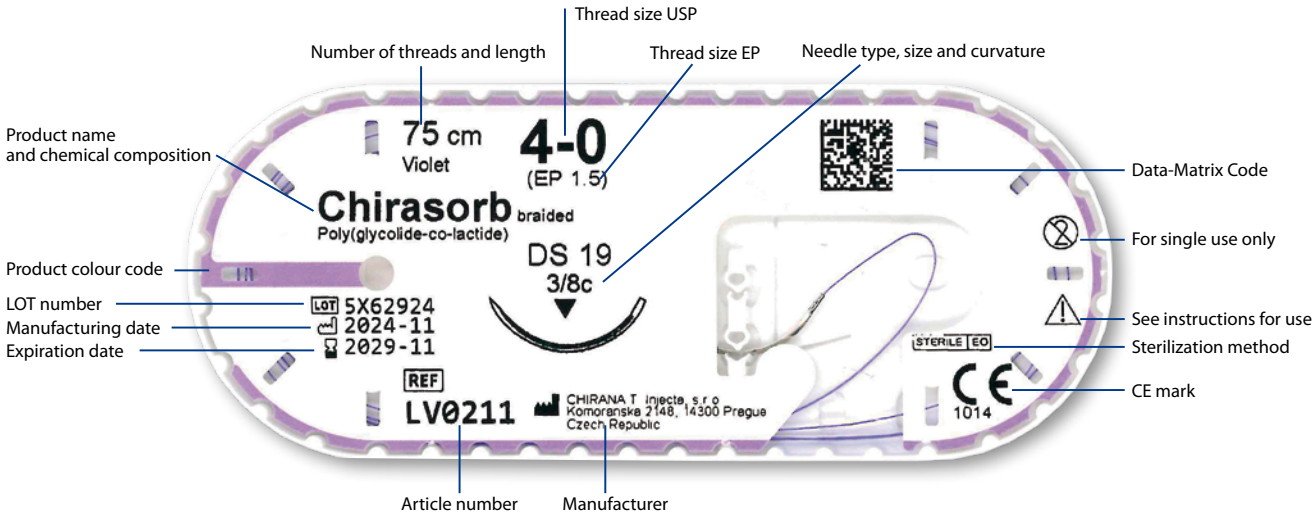
The publication of the European Pharmacopoeia (Ph. Eur.) resulted in a standardization of the classification of threads and gauges of surgical suture material.

The Ph. Eur. specifies a decimal classification and metric coding for the gauges. It quotes a thread diameter of 1/10 mm, so that the thread gauge of 3.5 has a diameter of 0.35 mm.

The following table of the gauges gives a comparison of the metric and the USP gauge coding.

EP/Metric	USP
0.2	**10-0**
0.3	**9-0**
0.4	**8-0**
0.5	**7-0**
0.7	**6-0**
1	**5-0**
1.5	**4-0**
2	**3-0**
3	**2-0**
3.5	**0**
4	**1**
5	**2**
6	**3+4**
7	**5**
8	**6**

Surgical Sutures - Labelling and Packaging



The packaging of our surgical suture material is stable, user-friendly and functional. It provides optimal mechanical and bacterial safety. The sutures are ready for use in a sterile foil or aluminium pack.

Each primary sales unit contains 24 individual packs, whereas some contain 12 individual packs (Loop sutures or Microsurgery sutures) or 20 individual packs (Chirapack sutures).

Short threads

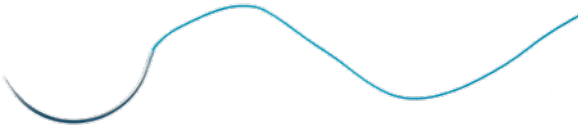
Pre-cut length surgical sutures.

Atraumatic sutures

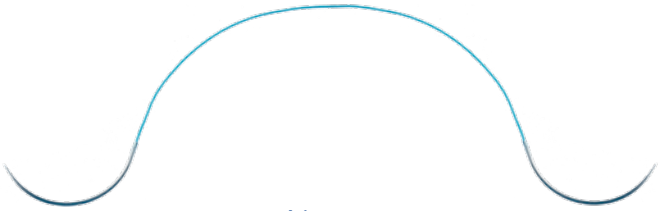
Pre-cut length surgical sutures, armed with a drilled end needle, ready for use. Removable needles are marked with an A behind the needle description.

Needle/Thread Combinations

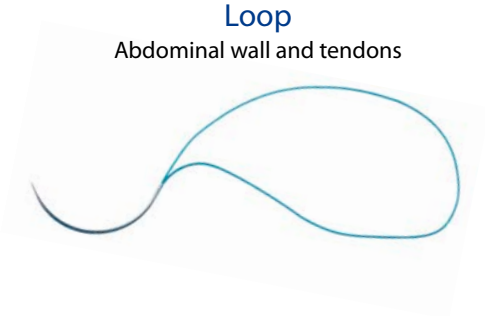
Single armed
Single stitch Continuous suture



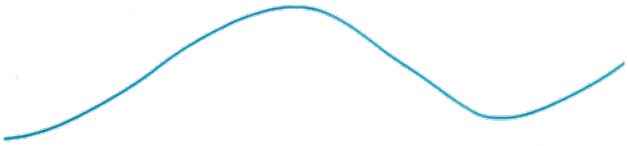
Double armed
Mainly for anastomosis of blood vessels or other anatomical ducts



Loop
Abdominal wall and tendons



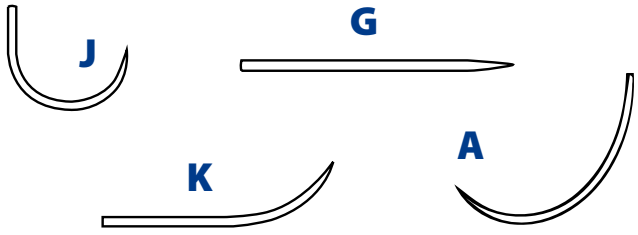
Ligatures

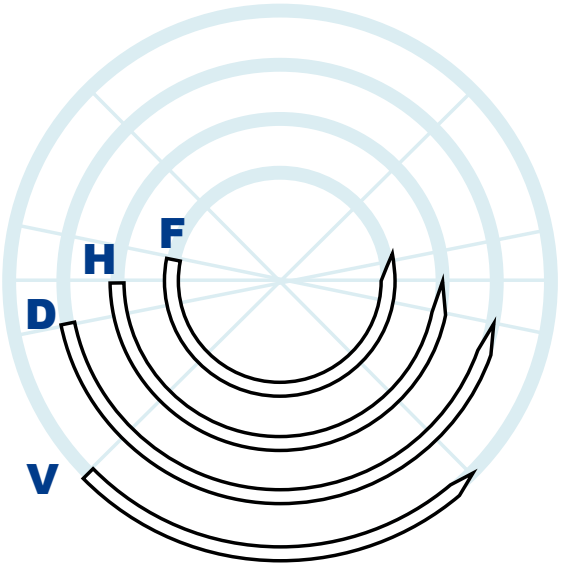


Needle Types

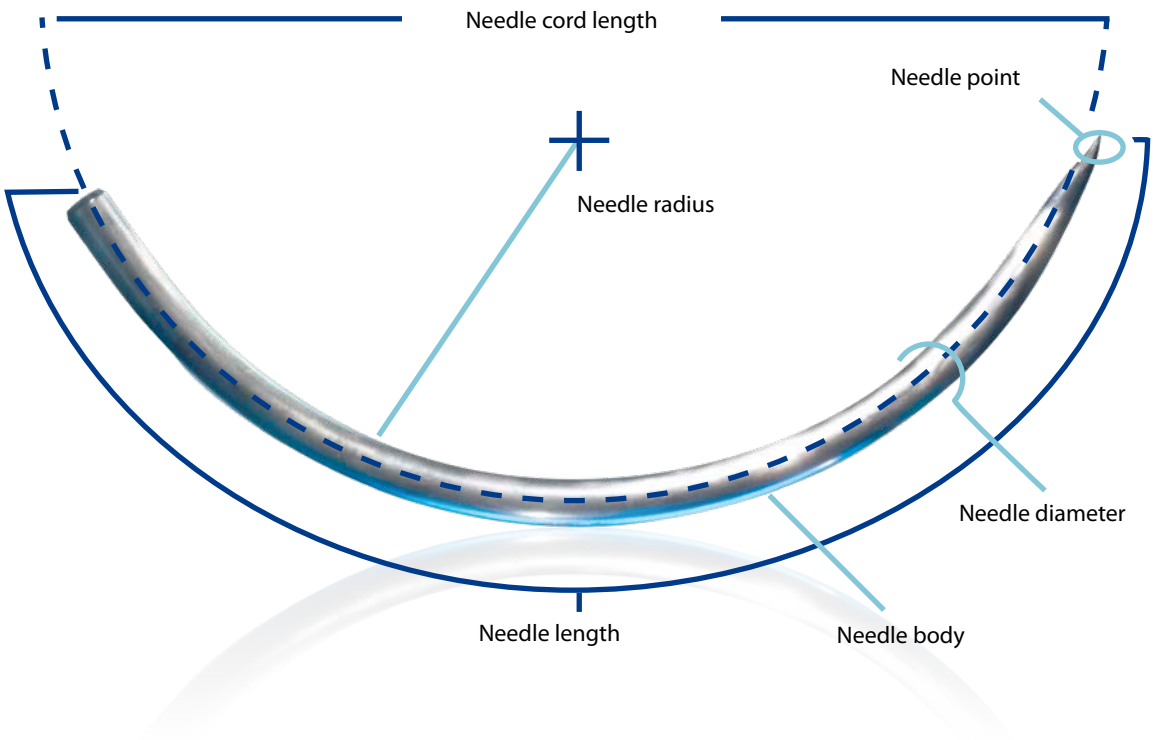
Needle Curvature	Needle Body	Needle Point	Speciality
V - 1/4	**R** - Round body	**T** - Tapercut	**s** - Slim, rectangular body
H - ½	**S** - Reverse cutting	**N** - Blunt	**A** - Take-off needle
D - 3/8	**SC** - Conventional cutting	**M** - Micropoint	**X** - Extra strong needle
F - 5/8	**LZ** - Spatula	**D** - Diamond	**Black** - Black needle
J - Hook	**RF** - Round, flattened body		
A - Asymmetric			
K - Ski			
G - Straight			

Needle Curvatures



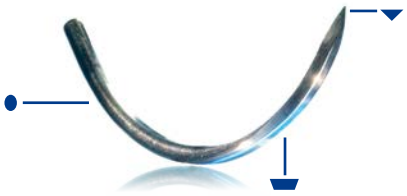


Needle Geometry

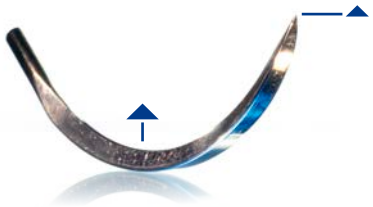


Taper point
(round body)

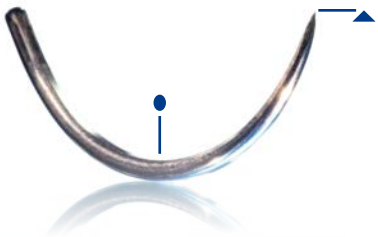
Trapezoid spatulated



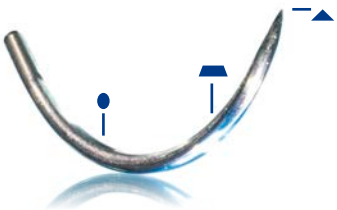
Conventional cutting
(inside cutting edge)



Tapercut



Reverse trapezoid spatulated



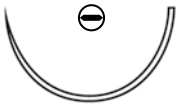
Reverse cutting
(outside cutting edge)

Blunt point

Atraumatic Surgical Needles

HR 1/2 circle, round body needle	Code	Length
	HR 8	8 mm
	HR 10	10 mm
	HR 13	13 mm
	HR 16	16 mm
	HR 17	17 mm
	HR 18	18 mm
	HR 22	22 mm
	HR 25	25 mm
	HR 26	26 mm
	HR 26 black	26 mm
	HR 27	27 mm
	HR 30	30 mm
	HR 35	35 mm
	HR 37	37 mm
	HR 40	40 mm
	HR 43	43 mm
	HR 45	45 mm
	HR 48	48 mm

HRT 1/2 circle, round body needle, tapercut	Code	Length
	HRT 10	10 mm
	HRT 11	11 mm
	HRT 13	13 mm
	HRT 17	17 mm
	HRT 20	20 mm
	HRT 22	22 mm
	HRT 25	25 mm
	HRT 26	26 mm
	HRT 30	30 mm
	HRT 31	31 mm
	HRT 37	37 mm
	HRT 40	40 mm
	HRT 45	45 mm
	HRT 48	48 mm

HRF 1/2 circle, flattened body needle, taper point	Code	Length
	HRF 13	13 mm
	HRF 17	17 mm
	HRF 20	20 mm
	HRF 22	22 mm
	HRF 26	26 mm
	HRF 31	31 mm

HS 1/2 circle, reverse cutting needle	Code	Length
	HS 12	12 mm
	HS 15	15 mm
	HS 18	18 mm
	HS 21	21 mm
	HS 22	22 mm
	HS 25	25 mm
	HS 26	26 mm
	HS 27	27 mm
	HS 30	30 mm
	HS 36	36 mm
	HS 37	37 mm
	HS 40	40 mm
	HS 45	45 mm
	HS 48	48 mm

DR 3/8 circle, round body needle	Code	Length
	DR 6	6 mm
	DR 8	8 mm
	DR 10	10 mm
	DR 12	12 mm
	DR 13	13 mm
	DR 15	15 mm
	DR 17	17 mm
	DR 18	18 mm
	DR 21	21 mm
	DR 30	30 mm
	DR 31	31 mm

DRT 3/8 circle, round body needle, tapercut	Code	Length
	DRT 10	10 mm
	DRT 10 black	10 mm
	DRT 11	11 mm
	DRT 13	13 mm
	DRT 17	17 mm

DS 3/8 circle, reverse cutting needle	Code	Length
	DS 10	10 mm
	DS 12	12 mm
	DS 15	15 mm
	DS 16	16 mm
	DS 19	19 mm
	DS 20	20 mm
	DS 24	24 mm
	DS 25	25 mm
	DS 26	26 mm
	DS 30	30 mm
	DS 36	36 mm
	DS 37	37 mm
	DS 38	38 mm
	DS 40	40 mm
	DS 50	50 mm
	DS 60	60 mm
	DS 90	90 mm

DSM 3/8 circle, reverse cutting needle, micropoint	Code	Length
	DSM 6.5	6.5 mm
	DSM 8	8 mm
	DSM 12	12 mm
	DSM 15	15 mm
	DSM 19	19 mm

Absorbable
Sutures

Chirasorb rapid braided

Chirlac rapid braided

Monolac monofilament

Chirasorb braided

Chirasorb Plus braided

Chirlac braided

Chirasorb rapid braided

Chirasorb rapid braided

Chirasorb rapid braided is a braided sterile absorbable surgical suture composed of a copolymer made from 90 % glycolide and 10 % L-lactide. Chirasorb rapid braided is treated with an absorbable synthetic coating consisting of a mixture of equal parts of a copolymer of 30 % glycolide and 70 % lactide and with calcium stearate. Chirasorb rapid braided is available in a range of gauge sizes and lengths; without needles or attached to stainless steel needles of varying types and sizes.

Absorption begins as a loss of tensile strength without appreciable loss of mass. The product elicits a minimal acute inflammatory reaction in tissues.

Progressive loss of tensile strength and absorption of Chirasorb rapid braided occurs by hydrolysis, when the polymer is degraded to glycolic and lactic acids, which are subsequently absorbed and metabolised by the body.

Indication: Chirasorb rapid braided is indicated for a wide variety of medical procedures to approximation soft tissues, such as wound closure after surgery or injury, ligation, and repair of various tissues, and to prevent bleeding from vessels during and after surgical procedure.

Contraindication: This suture may be inappropriate in elderly, malnourished, debilitated patients or in patients whose bad conditions may delay wound healing and must not be used in patients with allergies to any of the product components.

Sizes: 6/0 to 4 USP

Structure: Multifilament

Absorption method: Hydrolysis

Strength Retention Profile:

SHORT-TERM HEALING (12 days)

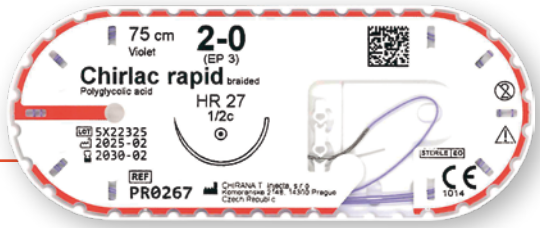
1 Day	100%
5 Days	60%
10-14 Days	0%

Mass Absorption profile: 42 days

Needle	EP	USP	Length	Colour	Article No.	Pcs./box
HR: ½ circle, round body needle						
HR 13	1	5/0	1 x 75 cm	Violet	LR0254	24
	1	5/0	1 x 45 cm	Natural	LQ0252	24
HR 18	1.5	4/0	1 x 75 cm	Violet	LR0256	24
	1.5	4/0	1 x 75 cm	Natural	LQ0256	24
	2	3/0	1 x 75 cm	Violet	LR0257	24
HR 22	1.5	4/0	1 x 75 cm	Violet	LR0261	24
	2	3/0	1 x 75 cm	Violet	LR0262	24
	2	3/0	1 x 75 cm	Natural	LQ0262	24
	3	2/0	1 x 75 cm	Violet	LR0263	24
HRF: ½ circle, flattened body needle, taper point						
HRF 17	1.5	4/0	1 x 75 cm	Natural	LQ9256	24
HS: ½ circle, reverse cutting needle						
HS 18	1.5	4/0	1 x 75 cm	Violet	LR0423	24
DS: 3/8 circle, reverse cutting needle						
DS 15	2	3/0	1 x 75 cm	Natural	LQ1217	24
DS 16	1	5/0	1 x 75 cm	Natural	LQ1220	24
DS 19	1.5	4/0	1 x 45 cm	Natural	LQ0216	24
	1.5	4/0	1 x 75 cm	Violet	LR0211	24
	2	3/0	1 x 75 cm	Natural	LQ1227	24

Chirlac rapid braided

Chirlac rapid braided



Chirlac rapid braided is a short-term absorbable, coated, synthetic, multifilament suture made of low molecular weight polyglycolic acid. The substances contained in the coating and suture are nonantigenic and noncollagenous. Chirlac rapid braided is available in violet and natural.

Progressive loss of tensile strength and absorption of Chirlac rapid braided occurs by hydrolysis, where the polymer degrades to glycolic acid, which is subsequently absorbed and metabolised by the body.

Absorption begins as a loss of tensile strength without appreciable loss of mass. The product elicits a minimal acute inflammatory reaction in tissues.

Indication: Gynaecology, Ophthalmic (e.g. conjunctiva), Odontology (e.g. oral mucosa), Paediatric and Skin Closure (e.g. intracutaneous, subcutaneous).

Contraindication: Chirlac rapid braided should not be used in tissues subject to expansion, stretching or distension, or which might require long-term mechanical support longer than seven days. The suture is not for use in cardiovascular or neurological tissues.

Sizes: 6/0 to 4 USP

Structure: Multifilament

Absorption method: Hydrolysis

Strength Retention Profile:

SHORT-TERM HEALING (12 days)

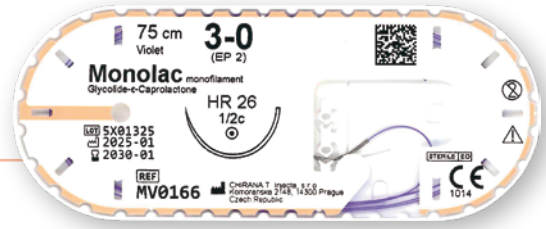
1 Day	100%
5 Days	60%
10-14 Days	0%

Mass Absorption profile: 42 days

Needle	EP	USP	Length	Colour	Article No.	Pcs./box
HR: ½ circle, round body needle						
HR 13	1 1.5	5/0 4/0	1 x 45 cm 1 x 45 cm	Natural Natural	PQ0252 PQ0253	24 24
HR 18	1.5	4/0	1 x 75 cm	Natural	PQ0256	24
HR 22	1.5 2	4/0 3/0	1 x 75 cm 1 x 75 cm	Natural Natural	PQ0261 PQ0262	24 24
DS: 3/8 circle, reverse cutting needle						
DS 12	1	5/0	1 x 45 cm	Natural	PQ0203	24
DS 15	1.5	4/0	1 x 75 cm	Natural	PQ1216	24
DS 19	1.5	4/0	1 x 45 cm	Natural	PQ0216	24
	1.5 2	4/0 3/0	1 x 75 cm 1 x 75 cm	Violet Violet	PR0211 PR0212	24 24

Monolac monofilament

Monolac monofilament



Monolac monofilament is a monofilament sterile absorbable surgical suture composed of a copolymer of glycolide and ε-caprolactone. Monolac monofilament is available in dyed, violet or in undyed natural colour. Monolac monofilament is available in a range of gauge sizes and lengths; without needles or attached to stainless steel needles of varying types and sizes.

The material is degraded into adipic acid, which is completely metabolised in the body. The process begins with a loss of tensile strength, followed by a loss of mass at a later stage.

Indication: Monolac monofilament is indicated for a wide variety of medical procedures to approximation soft tissues, such as wound closure after surgery or injury, ligation, and repair of various tissues, and to prevent bleeding from vessels during and after surgical procedure.

Contraindication: Monolac monofilament should not be used in tissues subject to expansion, stretching or distension, or which might require long-term mechanical support.

Sizes: 6/0 to 2 USP

Structure: Monofilament

Absorption method: Hydrolysis

Strength Retention Profile:

MID-TERM HEALING (30 days)

1 Day	100%
7 Days	50 - 60%
14 Days	20 - 30%

Mass Absorption profile: 90 - 120 days

Needle	EP	USP	Length	Colour	Article No.	Pcs./box
HR: ½ circle, round body needle						
HR 13	0.7	6/0	1 x 75 cm	Violet	MV0251	24
	1	5/0	1 x 75 cm	Violet	MV0252	24
	1	5/0	1 x 75 cm	Natural	MN0252	24
	1.5	4/0	1 x 75 cm	Violet	MV0253	24
HR 18	1	5/0	1 x 75 cm	Violet	MV0256	24
	1.5	4/0	1 x 75 cm	Violet	MV0257	24
	1.5	4/0	1 x 75 cm	Natural	MN0257	24
HR 22	1.5	4/0	1 x 75 cm	Violet	MV0261	24
	1.5	4/0	1 x 75 cm	Natural	MN0261	24
	2	3/0	1 x 75 cm	Violet	MV0262	24
	2	3/0	1 x 75 cm	Natural	MN0262	24
HS: ½ circle, reverse cutting needle						
HS 12	1	5/0	1 x 45 cm	Violet	MV0302	24
DS: 3/8 circle, reverse cutting needle						
DS 12	0.7	6/0	1 x 45 cm	Violet	MV0201	24
	0.7	6/0	1 x 45 cm	Natural	MN0201	24
	1	5/0	1 x 45 cm	Violet	MV0202	24
	1	5/0	1 x 45 cm	Natural	MN0202	24
	1	5/0	1 x 75 cm	Violet	MV0203	24
DS 13	1	5/0	1 x 45 cm	Violet	MV0103	24
DS 15	0.7	6/0	1 x 45 cm	Violet	MV0204	24
	1	5/0	1 x 45 cm	Violet	MV0205	24
	1	5/0	1 x 45 cm	Natural	MN0205	24
	1.5	4/0	1 x 45 cm	Violet	MV0206	24
	1.5	4/0	1 x 45 cm	Natural	MN0206	24
DS 16	1.5	4/0	1 x 45 cm	Violet	MV1206	24
	1	5/0	1 x 75 cm	Violet	MV1205	24
	1.5	4/0	1 x 75 cm	Violet	MV1204	24
DS 19	1	5/0	1 x 45 cm	Violet	MV0214	24
	1	5/0	1 x 45 cm	Natural	MN0214	24
	1.5	4/0	1 x 45 cm	Violet	MV0215	24
	1.5	4/0	1 x 45 cm	Natural	MN0215	24
	2	3/0	1 x 45 cm	Violet	MV0216	24
	2	3/0	1 x 45 cm	Natural	MN0216	24
	1	5/0	1 x 75 cm	Violet	MV0210	24
	1	5/0	1 x 75 cm	Natural	MN0218	24
	1.5	4/0	1 x 75 cm	Violet	MV0211	24
	1.5	4/0	1 x 75 cm	Natural	MN0211	24
	2	3/0	1 x 75 cm	Violet	MV0212	24
	2	3/0	1 x 75 cm	Natural	MN0212	24

Chirasorb braided

Chirasorb braided

Chirasorb braided is a mid-term absorbable, coated, synthetic, multifilament suture made of 90% glycolide and 10% L-lactide. The substances contained in the coating and suture are nonantigenic and noncollagenous.

Sterile Chirasorb braided is available in violet or natural. The product elicits a minimal acute inflammatory reaction in tissues.

Progressive loss of tensile strength and absorption of Chirasorb braided occurs by hydrolysis, when the polymer is degraded to glycolic and lactic acids, which are subsequently absorbed and metabolised by the body.

Indication: General soft tissue approximation and/or ligation in all specialties, including use in Ophthalmic surgery.

Contraindication: Chirasorb braided should not be used in tissues subject to expansion, stretching or distension, or which might require long-term mechanical support.

Sizes: 10/0 to 6 USP

Structure: Multifilament

Absorption method: Hydrolysis

Strength Retention Profile:

MID-TERM HEALING (35 days)

1 Day	100%
14 Days	75%
21 Days	50%

Mass Absorption profile: 56 - 70 days

Needle	EP	USP	Length	Colour	Article No.	Pcs./box
HR: ½ circle, round body needle						
HR 13	1	5/0	1 x 45 cm	Natural	LN0252	24
	1.5	4/0	1 x 45 cm	Natural	LN0253	24
HR 18	1.5	4/0	1 x 75 cm	Violet	LV0423	24
	1.5	4/0	1 x 75 cm	Natural	LN0256	24
	2	3/0	1 x 75 cm	Violet	LV0424	24
	2	3/0	1 x 75 cm	Natural	LN0257	24
HR 22	2	3/0	1 x 75 cm	Natural	LN0262	24
HRT: ½ circle, round body needle - tapercut						
HRT 17	2	3/0	1 x 75 cm	Natural	LN0562	24
HS: ½ circle, reverse cutting needle						
HS 21	1.5	4/0	1 x 75 cm	Violet	LV0300	24
	2	3/0	1 x 75 cm	Violet	LV0301	24
DS: 3/8 circle, reverse cutting needle						
DS 10	0.5	7/0	1 x 45 cm	Violet	LV0193	24
DS 12	0.7	6/0	1 x 45 cm	Violet	LV0201	24
	1	5/0	1 x 45 cm	Natural	LN1202	24
DS 15	0.7	6/0	1 x 45 cm	Violet	LV0200	24
	1.5	4/0	1 x 45 cm	Natural	LN1206	24
	1	5/0	1 x 75 cm	Natural	LN1305	24
DS 19	1	5/0	1 x 75 cm	Natural	LN1220	24
	1.5	4/0	1 x 75 cm	Natural	LN1211	24
	2	3/0	1 x 75 cm	Violet	LV0212	24
	2	3/0	1 x 75 cm	Natural	LN1212	24
DS 25	2	3/0	1 x 75 cm	Natural	LN1232	24

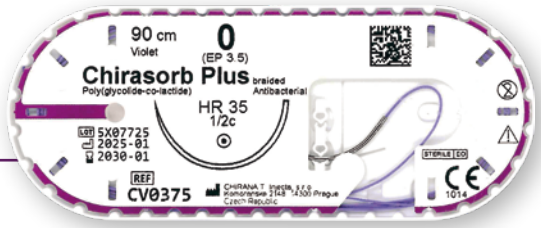
Pre-cut threads

EP	USP	Length	Colour	Article No.	Pcs./box
1.5	4/0	2 x 75 cm	Violet	LV0023	24

Chirasorb Plus braided

Chirasorb Plus braided

Antibacterial



Chirasorb Plus braided is a mid-term absorbable, antibacterial coated, synthetic, multifilament suture made of 90% glycolide and 10% L-lactide. The braided suture is covered with antibacterial coating, which consists of copolymer glycolide and lactide, calcium stearate and chlorhexidine diacetate.

Chlorhexidine is a cationic antiseptic with a wide range of antimicrobial effects. It is effective on both Gram-positive and Gram- negative bacteria; the mechanism of action is cytoplasmic membrane disruption.

Sterile Chirasorb Plus braided is available in violet or natural. The product elicits a minimal acute inflammatory reaction in tissues.

Progressive loss of tensile strength and absorption of Chirasorb Plus braided occurs by hydrolysis, when the polymer is degraded to glycolic and lactic acids, which are subsequently absorbed and metabolised by the body.

Indication: General soft tissue approximation and/or ligation in all specialties.

Contraindication: Chirasorb Plus braided should not be used in tissues subject to expansion, stretching or distension, or which might require long-term mechanical support. Chirasorb Plus braided should not be used in patients with known allergic reactions to Chlorhexidine.

Sizes: 5/0 to 4 USP

Structure: Multifilament

Absorption method: Hydrolysis

Strength Retention Profile:

MID-TERM HEALING (35 days)

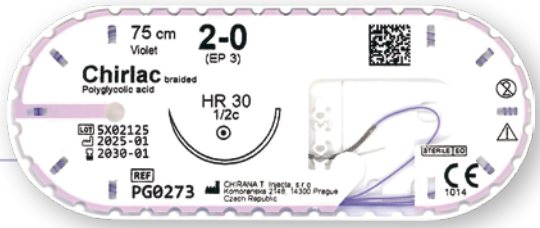
1 Day	100%
14 Days	75%
21 Days	50%

Mass Absorption profile: 50 - 70 days

Needle	EP	USP	Length	Colour	Article No.	Pcs./box
HR: ½ circle, round body needle						
HR 13	1 1.5	5/0 4/0	1 x 45 cm 1 x 45 cm	Natural Natural	CN0252 CN0253	24 24
HR 18	1.5 2	4/0 3/0	1 x 75 cm 1 x 75 cm	Natural Natural	CN0256 CN0257	24 24
HR 26	1.5	4/0	1 x 75 cm	Natural	CN0363	24
DS: 3/8 circle, reverse cutting needle						
DS 12	1	5/0	1 x 45 cm	Natural	CN1202	24
DS 15	1.5	4/0	1 x 45 cm	Natural	CN1206	24
DS 19	1 1.5 1.5 2 2	5/0 4/0 4/0 3/0 3/0	1 x 45 cm 1 x 45 cm 1 x 45 cm 1 x 45 cm 1 x 45 cm	Natural Violet Natural Violet Natural	CN1215 CV0215 CN1216 CV0216 CN1217	24 24 24 24 24

Chirlac braided

Chirlac braided



Chirlac braided is a mid-term absorbable, synthetic, multifilament suture material of extremely high tensile strength made of the homopolymer of hydroacetic acid (glycolic acid).

The thread has a homogeneous structure and surface, which gives it low frictional properties and holds firmly without slipping when knotted.

Chirlac braided is coated with an absorbable substance, which reduces the capillary effect, provides excellent holding properties and diminishes the tendency to cut into the flesh, while ensuring that the knots hold firmly.

Chirlac braided is degraded in the body by a simple hydrolytic process. The degraded products are metabolised completely in the body. Absorption begins as a loss of tensile strength without appreciable loss of mass.

Indication: General soft tissue approximation and/or ligation, for the surgical adaptation of Muscles and Fascia, for suturing of Parenchymal organs, Peripheral nerves, for ligatures of small vessels and for Intradermal suturing.

Contraindication: Chirlac braided should not be used in tissues subject to expansion, stretching or distension, or which might require long-term mechanical support.

Sizes: 9/0 to 6 USP

Structure: Multifilament

Absorption method: Hydrolysis

Strength Retention Profile: MID-TERM HEALING (28 - 35 days)

1 Day	100%
14 Days	65% - 75%
21 Days	45% - 50%

Mass Absorption profile: 80 - 90 days

Needle	EP	USP	Length	Colour	Article No.	Pcs./box
HR: ½ circle, round body needle						
HR 13	1	5/0	1 x 45 cm	Natural	PN0252	24
	1.5	4/0	1 x 45 cm	Natural	PN0253	24
HRT: ½ circle, round body needle - tapercut						
HRT 17	1	5/0	1 x 75 cm	Violet	PG0560	24
	1.5	4/0	1 x 75 cm	Violet	PG0561	24
	2	3/0	1 x 75 cm	Violet	PG0562	24
HRT 22	2	3/0	1 x 75 cm	Natural	PN0572	24
DS: 3/8 circle, reverse cutting needle						
DS 12	0.7	6/0	1 x 45 cm	Violet	PG0201	24
DS 15	1.5	4/0	1 x 45 cm	Natural	PN1206	24
	1.5	4/0	1 x 45 cm	Violet	PG0206	24
	2	3/0	1 x 45 cm	Natural	PN1207	24
DS 19	1	5/0	1 x 45 cm	Natural	PN1215	24
	1.5	4/0	1 x 45 cm	Violet	PG0215	24
	1.5	4/0	1 x 45 cm	Natural	PN1216	24
	2	3/0	1 x 45 cm	Violet	PG0216	24
	2	3/0	1 x 45 cm	Natural	PN1217	24
	1.5	4/0	1 x 75 cm	Violet	PG0211	24
DS 25	1.5	4/0	1 x 75 cm	Violet	PG0222	24
	2	3/0	1 x 75 cm	Violet	PG0223	24
HS: ½ circle, reverse cutting needle						
HS 18	2	3/0	1 x 75 cm	Violet	PG0424	24
DSM: 3/8 circle, reverse cutting needle - micropoint						
DSM 12	1	5/0	1 x 45 cm	Violet	PG0302	24
	1	5/0	1 x 45 cm	Natural	PN1202	24

Non-absorbable Sutures

Chiraflon monofilament

Chiralen monofilament

Silon monofilament

Tervalon braided

Silk braided

Chiraflon monofilament

Chiraflon monofilament

Chiraflon monofilament is a non-absorbable suture made of PVDF (similar to teflon).
Physiologically this thread is completely inert.

Chiraflon monofilament offers optimal smoothness and superior knotting properties.
The thread is characterised by its high tensile strength.

No splitting occurs even under considerable strain.

Indication:	All surgical specialities, especially Orthopaedic, Traumatology (tendons), Plastic and Ophthalmic surgery.
Contraindication:	Chiraflon monofilament must not penetrate into the inner parts of the digestive and urinary tracts.
Chemical Composition:	Polyvinylidene Fluoride (PVDF)
Sizes:	8/0 to 3 USP
Structure:	Monofilament
Absorption method:	Non-absorbable
Colour:	Blue

Needle	EP	USP	Length	Colour	Article No.	Pcs./box
3/8 circle, reverse cutting needle						
DS 12	0.7	6/0	1 x 45 cm	Blue	TF6101	24
	1	5/0	1 x 45 cm	Blue	TF6102	24
DS 15	1	5/0	1 x 45 cm	Blue	TF6105	24
	1.5	4/0	1 x 45 cm	Blue	TF6106	24
DS 19	1	5/0	1 x 45 cm	Blue	TF6110	24
	1.5	4/0	1 x 45 cm	Blue	TF6115	24
	2	3/0	1 x 45 cm	Blue	TF6116	24
	3	2/0	1 x 45 cm	Blue	TF6117	24
	1.5	4/0	1 x 75 cm	Blue	TF6111	24
DS 25	2	3/0	1 x 45 cm	Blue	TF6126	24
DSM: 3/8 circle, reverse cutting needle - micropoint						
DSM 12	0.7	6/0	1 x 45 cm	Blue	TF6001	24

Chiralen monofilament

Chiralen monofilament

Chiralen monofilament is a non-absorbable suture made of polypropylene. The thread is hydrophobic and is not subject to degradation by tissue enzymes.

Chiralen monofilament has a smooth, non-porous surface, that guarantees a clean and smooth passage through the tissue, optimal elasticity, good elongation properties and high visibility. In tissues, it can cause a minimal acute inflammatory reaction.

Indication:	All surgical specialities, especially Cardiovascular, Plastic, Reconstructive, Ophthalmic, Orthopaedic and Traumatology (e.g. tendons).
Contraindication:	Chiralen monofilament must not penetrate into the inner parts of the digestive and urinary tracts.
Chemical Composition:	Polypropylene
Sizes:	10/0 to 2 USP
Structure:	Monofilament
Absorption method:	Non-absorbable
Colour:	Blue and Black

Needle	EP	USP	Length	Colour	Article No.	Pcs./box
HR: ½ circle, round body needle						
HR 13	1	5/0	1 x 75 cm	Blue	PP5146	24
HR 18	1	5/0	1 x 75 cm	Blue	PP5152	24
	1.5	4/0	1 x 75 cm	Blue	PP5153	24
	2	3/0	1 x 75 cm	Blue	PP5154	24
HRT: ½ circle, round body needle - tapercut						
HRT 13	1	5/0	1 x 75 cm	Blue	PP5422	24
DRT: 3/8 circle, round body needle - tapercut						
DRT 13	1	5/0	1 x 75 cm	Blue	PP5310	24
HS: ½ circle, reverse cutting needle						
HS 21	2	3/0	1 x 45 cm	Blue	PP5274	24
DS: 3/8 circle, reverse cutting needle						
DS 12	0.7	6/0	1 x 45 cm	Blue	PP5101	24
	1	5/0	1 x 45 cm	Blue	PP5102	24
DS 15	1	5/0	1 x 45 cm	Blue	PP5106	24
	1.5	4/0	1 x 45 cm	Blue	PP5107	24
	1	5/0	1 x 75 cm	Blue	PP4108	24
	1.5	4/0	1 x 75 cm	Blue	PP4109	24
	2	3/0	1 x 75 cm	Blue	PP4110	24
DS 19	1.5	4/0	1 x 45 cm	Blue	PP5510	24
	1	5/0	1 x 75 cm	Blue	PP5109	24
	1.5	4/0	1 x 75 cm	Blue	PP5110	24
	2	0/3	1 x 75 cm	Blue	PP5111	24
DS 25	3	2/0	1 x 45 cm	Blue	PP5517	24
DSM: 3/8 circle, reverse cutting needle, micropoint						
DSM 15	1	5/0	1 x 45 cm	Blue	PP5006	24
DSM 25	2	3/0	1 x 75 cm	Blue	PP5027	24

Silon monofilament

Silon monofilament

Silon monofilament is a non-absorbable, synthetic suture made of polyamide, which has a smooth non-porous surface.

The thread is extremely useful for skin sutures and has a high tensile strength in knots, and knots tie down easily.
The thread is available in blue and black.

Silon monofilament can cause a slight initial inflammatory tissue reaction.

Indication:	Plastic and General surgery and wherever suturing the skin.
Contraindication:	Silon monofilament should not be used when long-term mechanical support is required.
Chemical Composition:	Polyamide 6
Sizes:	10/0 to 2 USP
Structure:	Monofilament
Absorption method:	Non-absorbable
Colour:	Blue and Black

Needle	EP	USP	Length	Colour	Article No.	Pcs./box
HR: ½ circle, round body needle						
HR 13	1 1.5	5/0 4/0	1 x 45 cm 1 x 45 cm	Blue Blue	SM4124 4125	24 24
HR 18	1.5	4/0	1 x 75 cm	Blue	4104	24
HR 22	2	3/0	1 x 75 cm	Blue	4106	24
HRT: ½ circle, round body needle - tapercut						
HRT 13	0.7	6/0	1 x 45 cm	Blue	SM2552	24
HRT 17	1.5	4/0	1 x 45 cm	Blue	SM2555	24
HS: ½ circle, reverse cutting needle						
HS 15	2	3/0	1 x 45 cm	Blue	SM2308	24
HS 18	1.5	4/0	1 x 75 cm	Blue	4420	24
	2	3/0	1 x 90 cm	Blue	4421	24
DS: 3/8 circle, reverse cutting needle						
DS 12	1 1.5	5/0 4/0	1 x 45 cm 1 x 45 cm	Blue Blue	SM2256 SM2257	24 24
DS 15	1 1.5 2	5/0 4/0 3/0	1 x 45 cm 1 x 45 cm 1 x 45 cm	Blue Blue Blue	SM2261 SM2262 SM2263	24 24 24
	1 1.5	5/0 4/0	1 x 75 cm 1 x 75 cm	Blue Blue	SM2361 SM2362	24 24
DS 19	1 1.5 2	5/0 4/0 3/0	1 x 45 cm 1 x 45 cm 1 x 45 cm	Blue Blue Blue	SM2266 SM2367 SM2368	24 24 24
	1 1.5 2	5/0 4/0 3/0	1 x 75 cm 1 x 75 cm 1 x 75 cm	Blue Blue Blue	SM2366 SM2267 SM2268	24 24 24
DS 24	1.5 2	4/0 3/0	1 x 75 cm 1 x 75 cm	Blue Blue	SM3277 SM3276	24 24
DS 25	1	5/0	1 x 75 cm	Blue	SM2375	24

Tervalon braided

Tervalon braided

Tervalon braided is a polyester suture material with a special coating, which guarantees effortless tissue passage and excellent knot–tying characteristics.

The extreme tensile strength and tissue compatibility are further positive characteristics of Tervalon braided, which is used in all areas of surgery due to its favourable features.

Tervalon braided is applicable wherever non-absorbability and low-friction passage through tissues are needed.

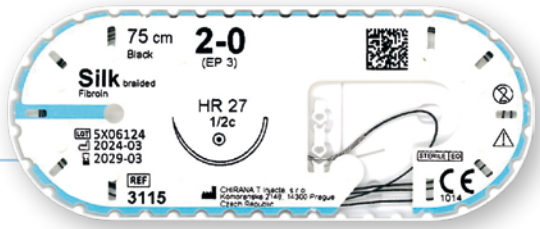
The suture elicits a minimal inflammatory reaction in tissues, which is followed by gradual encapsulation of the suture by fibrous connective tissue.

Indication:	Whenever non-absorbability and low friction passage through tissues are needed. It is especially useful in suturing Tendons, Schwann sheaths and skin in Plastic and Reconstructive surgery.
Contraindication:	Tervalon braided must not penetrate into the inner parts of the digestive and urinary tracts.
Chemical Composition:	Polyester
Sizes:	6/0 to 6 USP
Structure:	Multifilament
Absorption method:	Non-absorbable
Colour:	Green

Needle	EP	USP	Length	Colour	Article No.	Pcs./box
HR: ½ circle, round body needle						
HR 18	1.5 2 3	4/0 3/0 2/0	1 x 75 cm 1 x 75 cm 1 x 75 cm	Green Green Green	TG4456 TG4457 TG4458	24 24 24
HR 22	1.5 2	4/0 3/0	1 x 75 cm 1 x 75 cm	Green Green	TG4465 TG4466	24 24
HRT: ½ circle, round body needle - tapercut						
HRT 17	1.5 2	4/0 3/0	1 x 75 cm 1 x 75 cm	Green Green	TG4627 TG4628	24 24
HS: ½ circle, reverse cutting needle						
HS 18	1.5 2	4/0 3/0	1 x 75 cm 1 x 75 cm	Green Green	TG4508 TG4509	24 24
HS 21	1.5	4/0	1 x 75 cm	Green	TG4608	24
HS 25	2	3/0	1 x 75 cm	Green	TG4511	24
DS: 3/8 circle, reverse cutting needle						
DS 15	1.5	4/0	1 x 45 cm	Green	TG4548	24
DS 19	1.5 2	4/0 3/0	1 x 75 cm 1 x 75 cm	Green Green	TG4553 TG4554	24 24
DS 25	2	3/0	1 x 75 cm	Green	TG4564	24
DS 30	2	3/0	1 x 75 cm	Green	TG4574	24

Silk braided

Silk braided



Silk braided is a natural and non-absorbable, multifilament suture material. To give Silk braided a certain stiffness a special technology is applied.

The braided suture is stiffened by inserting a twisted stem from the same material. The Silk is coated to achieve water resistance and avoid its high capillary effect.

Silk braided is characterised by its constant thread diameter and high tensile strength. The advantages of Silk braided sutures are their extreme pliability, ease of handling and excellent knot strength.

Indication:	Skin closure, Subcutaneous tissue, Fascia, Peritoneum, Plastic surgery, Gynaecology and the organs of the Gastrointestinal tract.
Contraindication:	Silk braided should not be used for suturing infected wounds. Silk braided cannot be used when permanent suture stability is required.
Chemical Composition:	Natural silk
Sizes:	9/0 to 5 USP
Structure:	Multifilament
Absorption method:	Non-absorbable
Colour:	Black

Needle	EP	USP	Length	Colour	Article No.	Pcs./box
HR: ½ circle, round body needle						
HR 13	1	5/0	1 x 45 cm	Black	3102	24
HR 16	1.5	4/0	1 x 75 cm	Black	3124	24
HR 17	2	3/0	1 x 75 cm	Black	3126	24
HR 22	1.5 2	4/0 3/0	1 x 75 cm 1 x 75 cm	Black Black	HB3107 3108	24 24
HRT: ½ circle, round body needle - tapercut						
HRT 17	1.5 2	4/0 3/0	1 x 45 cm 1 x 45 cm	Black Black	3153 3154	24 24
HS: ½ circle, reverse cutting needle						
HS 18	1.5 2	4/0 3/0	1 x 75 cm 1 x 75 cm	Black Black	3405 3406	24 24
DS: 3/8 circle, reverse cutting needle						
DS 12	0.7 1 1.5	6/0 5/0 4/0	1 x 45 cm 1 x 45 cm 1 x 45 cm	Black Black Black	3312 3313 3314	24 24 24
	1	5/0	1 x 75 cm	Black	3317	24
DS 16	1.5 2	4/0 3/0	1 x 75 cm 1 x 75 cm	Black Black	3331 3332	24 24
DS 19	1.5 2	4/0 3/0	1 x 45 cm 1 x 45 cm	Black Black	3335 HB3336	24 24
	2	3/0	1 x 75 cm	Black	3336	24
DS 25	1.5 2	4/0 3/0	1 x 45 cm 1 x 45 cm	Black Black	3343 3344	24 24

VMG Vitrex Medical Group is dedicated to developing and distributing healthcare products of the highest quality. With a strong commitment to innovation and excellence, we aim to provide solutions that improve lives and support healthcare professionals worldwide.

Our vision is to operate as one united team. This means aligning our strategy, values, departments, processes, knowledge, and capabilities to work seamlessly together. By fostering collaboration and sharing expertise across the group, we ensure that our collective strengths translate into better products, stronger partnerships, and greater value for patients and customers.

At VMG, we believe that teamwork, innovation, and dedication are the keys to driving progress in healthcare. We strive to be the leading European medical device & IVD manufacturing group, developing, producing and supplying high-quality healthcare products and tailormade med-tech solutions that embody special expertise, reliability, trustworthiness and are made with respect and dedication to enhance the life of healthcare professionals and their patients worldwide.

Manufacturing sites

CHIRANA T.Injecta, a. s. Slovakia

CHIRANA T. Injecta is a global, state of the art manufacturer of healthcare products, which was founded in 1935.

In 1947 CHIRANA T. Injecta started manufacturing glass syringes and they have ever since focused on development and production of high quality, disposable syringes, needles and metal tubes for the healthcare sector and med-tech companies.

Vitrex Medical A/S Denmark

Vitrex Medical was founded in 1967, where they started producing resistors for televisions, which later on evolved to producing capillary tubes to transport liquids.

With more than 50 years of experience Vitrex Medical has become the largest manufacturer of capillary tubes in the world today by developing equipment, establishing technologies, and optimizing production processes.

CHIRANA T. Injecta, s.r.o. Czech Republic

CHIRANA T. Injecta was founded in 1930. Since the early 1990s they have made substantial investments in upgrading the production resources, enabling the company to offer products in a unique quality.

Their more than 90 years of experience with manufacturing sutures has resulted in top priority within quality control, product development and sutures manufactured in line with state of the art technology.

Notes

For different specialties, procedures and tissue types within human, veterinary and dental market, Chirmax Surgical provides state of the art, European quality surgical sutures and meshes to improve the lives of patients worldwide. Each individual production process is subject to strict scientific quality control.

Surgical Sutures
The choice of needle to be used must rest with the surgeon and may take several factors into account. Chirmax Surgical Sutures are manufactured in a wide range of types, shapes, lengths and diameters with high quality Mani Japanese needles to cover the most demanding requirements.
Choose between more than 5.000 absorbable and non-absorbable sutures and special needle products. We also develop and produce custom made sutures.

Strengthening Healing,
Supporting Recovery

VMG Vitrex Medical Group

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