

www.kruuse.com

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KRUUSE sutures - new and improved quality

KRUUSE is proud to present our new and improved assortment of high quality sutures. We hope you will enjoy your suturing work with our new KRUUSE sutures.

The needles are high quality stainless steel from a highly recommended supplier. The supplier of the suture materials is also highly recommended and known for excellent quality. Both suppliers deliver needles/sutures to the humane markets.

Both sutures and needles are manufactured to meet our high standard of inspection and control, as KRUUSE is committed to our "Code of Conduct". This applies to Quality/Environmental/Occupational Health and Safety Policy - Code of Conduct.

Regarding quality and environment, KRUUSE aspires to use quality-orientated and environmentally certified suppliers, or alternatively, suppliers that are otherwise able to substantiate implementation of environmental management systems or other environmental-enhancing measures.

Code of conduct is valid for both supplier and sub-supplier if any.

Key points from the Environmental Policy specify, among other things, that the supplier must:

- Aim to reduce over-packaging
- Aim to use recycled board for packaging
- Aim to ship all KRUUSE deliveries in joint consignments in order to promote
 efficient, fuel-saving transportation

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Regarding Occupational Health and Safety, KRUUSE Code of Conduct specifies, among other things, that our suppliers:

- Must on demand procure documentation for compliance with health and safety regulations and/or other relevant legislation
- Must aspire to ensure a healthy and safe working environment for his/her employees in terms of preventing accidents or circumstances that are detrimental to the health – caused by/in connection with/occurring during working hours or as a result of the work process/functions
- Are to respect that profiting from/exploitation of vulnerable groups such as children or illegal immigrants is unacceptable
- Must comply with (and act in accordance with) all international human rights conventions and standards on bans on employment of minors etc. – and for Denmark, according to Danish legislation standards on employment of minors to carry out certain tasks, not precluding employment carried out in countries outside Denmark – during manufacture of products delivered to KRUUSE.

All of the above specifications are part of our KRUUSE company policy – Code of Conduct and secure the end-user as well.

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影话法

KRUUSE

Enjoy your work with KRUUSE sutures!

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KRUUSE Monofast

Monofilament: For smooth passage through tissue and high tissue compatibility
Synthetic: Minimal tissue reaction
Absorbable: By hydrolysis

KRUUSE Monofast is a monofilament, synthetic suture with a smooth surface that gives minimal tissue reaction and decreased incidence of infection and trauma.

KRUUSE Monofast meets all the requirements established by the European Pharmacopoeia (EP) for Synthetic Absorbable Monofilament Surgical Sutures.

Absorption: Absorbable:

- Complete mass absorption in approximately 90-120 days
- Absorption by hydrolysis

Chemical composition:

 Monofast is fast absorbable synthetic monofilament suture material composed of Polyglycolide-poly (e-caprolactone) copolymer (PGCL).

Tensile Strength:

- 60 % remains after 7 days
- 25 % remains after 14 days
- 0 % remains after 28 days
- Complete mass absorption in approximately 90-120 days

Colour:

Violet and undyed

Indications:

KRUUSE Monofast is commonly used in soft tissues and ligation where absorbable sutures are indicated, including:

- Subcutaneous or intracutaneous suturing
- Gl-surgery
- Urological surgery
- Suturing of oral cavity mucosa

Contraindications:

• Where prolonged support from suturing is required

Range:

- USP 5-0 to 1
- EP 1 to 4

Sterilization method:

• EO

Packing:

• Boxes of 18 peel packs



KRUUSE Monofast

Shape of needle	Needle length mm	USP	EP	Length in cm	Suture colour	Number per box	Cat. No
3/8 circle, reverse cutting	24	2-0	3	70	Violet	18	152244
	24	2-0	3	70	Undyed	18	152226
	26	2-0	3	70	Violet	18	152225
24 mm	26	0	3.5	70	Violet	18	152220
26 mm	26	0	3.5	70	Undyed	18	152211
30 mm	30	0	3.5	70	Violet	18	152222
36 mm	36	1	4	70	Violet	18	152223
1/2 circle, round bodied, taperpoint	26	2-0	3	70	Violet	18	152224
26 mm	30	0	3.5	70	Violet	18	152221
30 mm 36 mm	36	1	4	70	Violet	18	152245
1/2 circle, taperpoint extra	26	2-0	3	70	Violet	18	152212

KRUUSE Suture Concept



KRUUSE Sacryl

Multifilament, braided: For secure knot tying and easy handling Synthetic: Minimal tissue reaction Coated: For easy knot tying and smooth passage through tissue

Absorbable: By hydrolysis

KRUUSE Sacryl is a braided and coated multifilament synthetic suture composed of Polyglactin 910.

Polyglactin 910 sutures are the most widely used braided and coated synthetic absorbable sutures in the world. On account of its superior properties, this suture has replaced catgut sutures in most applications. In use, KRUUSE Sacryl was found to be non-antigenic, eliciting only mild tissue reactivity during the absorption process.

Absorption: Absorbable:

- Complete mass absorption in approximately 56-63 days
- Absorption by hydrolysis

Chemical composition:

 KRUUSE Sacryl is composed of Polyglactin 910 (co-polymer of 90% Glycolide and 10% L-lactide)

Tensile Strength:

- 70 % remains after 14 days
- 50 % remains after 21 days (6-0 and larger)
- 40 % remains after 21 days (7-0 and smaller)
- 25 % remains after 28 days
- Complete mass absorption in approximately 56-63 days

Colour:

• Violet and undyed

Indications:

KRUUSE Sacryl sutures are indicated for soft tissue approximation and ligation, where absorbable sutures are indicated, including:

- Suturing of subcutaneous tissue
- Fascia
- Joint capsules
- Muscles
- Uterus and GI-surgery
- Vascular surgery
- Ophthalmic surgery

Contraindications:

· Where permanent support is required

Range:

- USP 8-0 to 2
- EP 0.4 to 5

Sterilization method:

• EO

Packing:

• Boxes of 18 peel packs



Shape of needle	Needle length mm	USP	EP	Length in cm	Suture colour	Number per box	Cat. No
3/8 circle, conventional cutting	26	2-0	3	70	Undyed	18	152564



KRUUSE Sacryl

Shape of needle	Needle length mm	USP		Length in cm	Suture colour	Number per box	Cat. No
3/8 circle, reverse cutting	24	2-0	3	70	Violet	18	152290
24 mm	26	2-0	3	70	Undyed	18	152565
26 mm	30	2-0	3	70	Violet	18	152294
30 mm	30	0	3.5	70	Violet	18	152280
36 mm	36	1	4	70	Violet	18	152286
1/2 circle, reverse cutting	30	2-0	3	70	Violet	18	152318
	36	2-0	3	70	Violet	18	152295
30 mm	36	0	3.5	70	Violet	18	152283
36 mm	40	0	3.5	70	Violet	18	152284
	48	0	3.5	90	Violet	18	152285
40 mm	48	1	4	90	Violet	18	152288
48 mm	48	2	5	90	Violet	18	152289
1/2 circle, round bodied, taperpoint	26	2-0	3	70	Violet	18	152291
	30	2-0	3	70	Violet	18	152322
26 mm	30	0	3.5	70	Violet	18	152281
30 mm	36	0	3.5	70	Violet	18	152323
	36	2-0	3	45	Violet	18	152293
36 mm	36	2-0	3	70	Violet	18	152317
40 mm	36	1	4	70	Violet	18	152287
48 mm	40	1	4	90	Violet	18	152324
	48	2	5	90	Violet	18	152316
65 mm	65	2	5	120-loop	Violet	18	152321
1/2 circle, taperpoint extra	30	2-0	3	70	Violet	18	152566
30 mm 36 mm	36	2-0	3	70	Violet	18	152567
1/2 circle, round bodied, tapercut	26	2-0	3	70	Violet	18	152326
	30	2-0	3	70	Violet	18	152327
	30	0	3.5	70	Violet	18	152569
26 mm	30	1	4	70	Violet	18	152570
30 mm	36	0	3.5	70	Violet	18	152328
36 mm	40	2-0	3	70	Undyed	18	152319
	40	0	3.5	70	Undyed	18	152320
40 mm	40	1	4	90	Violet	18	152329
65 mm	65	2	5	120-loop	Violet	18	152325



KRUUSE Sacryl Plus

Multifilament, braided: For secure knot tying and easy handling Synthetic: Minimal tissue reaction

Coated: For easy knot tying and smooth passage through tissue **Antibacterial:** To reduce incidence of infection, oedema and pain **Absorbable:** By hydrolysis

KRUUSE Sacryl Plus is an antibacterial, absorbable, synthetic, braided and coated suture containing Chlorhexidine diacetate. Chlorhexidine diacetate is the antibacterial component.

KRUUSE Sacryl Plus, being an absorbable suture, should not be used where extended approximation of tissue under stress or tension is required and in patients with known allergic reactions to Chlorhexidine diacetate.

KRUUSE Sacryl Plus tested in vitro creates a zone of inhibition against the most common surgical site pathogens including Staphylococcus aureus.

Absorption: Absorbable:

- Complete mass absorption in approximately 56-63 days
- Absorption by hydrolysis

Chemical composition:

 KRUUSE Sacryl is composed of Polyglactin 910 (copolymer of 90% Glycolide and 10% L-lactide)

Tensile Strength:

- 70 % remains after 14 days
- 50 % remains after 21 days
- 25 % remains after 28 days
- Complete mass absorption in approximately 56-63 days

Colour:

· Violet and undyed

Indications:

KRUUSE Sacryl sutures are indicated for soft tissue approximation and ligation, where absorbable sutures are indicated, including:

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- Suturing of subcutaneous tissue
- Fascia
- Joint capsules
- Muscles
- Uterus and GI-surgery
- Vascular surgery

Contraindications:

· Where permanent support is required

Range:

- USP 5-0 to 2
- EP 1 to 5

Sterilization method:

EO

Packing:

• Boxes of 18 peel packs





KRUUSE Sacryl Plus

Shape of needle	Needle length mm	USP	EP	Length in cm	Suture colour	Number per box	Cat. No
3/8 circle, reverse cutting	19	2-0	3	70	Violet	18	152340
	24	2-0	3	70	Violet	18	152331
19 mm	30	2-0	3	70	Violet	18	152332
24 mm 30 mm	30	0	3.5	70	Violet	18	152330
36 mm	36	1	4	90	Violet	18	152341
48 mm	48	2	5	90	Violet	18	152342



KRUUSE PGA

Multifilament, braided: For secure knot tying and easy handling **Synthetic:** Minimal tissue reaction

Coated: For easy knot tying and smooth passage through tissue **Absorbable:** By hydrolysis

KRUUSE PGA is an absorbable, synthetic, braided and coated suture.

PGA is a synthetic absorbable suture based on Polyglycolic acid. PGA sutures, coated with polycaprolactone and calcium stearate, are inert, non-antigenic and non-pyrogenic.

PGA complies with the requirements of USP and EP, is extremely soft and smooth and has a high knot security.

Absorption: Absorbable:

- Complete mass absorption in approximately 60-90 days
- Absorption by hydrolysis

Chemical composition:

 KRUUSE PGA is composed of Polyglycolic acid coated with polycaprolactone and calcium stearate

Tensile Strength:

- 65 % remains after 14 days
- 35 % remains after 21 days
- Complete mass absorption in approximately 60-90 days

Colour:

Violet

Indications:

KRUUSE PGA sutures are indicated for soft tissue approximation and ligation, where absorbable sutures are indicated, including:

- Suturing of subcutaneous tissue
- Fascia/abdominal wall closure
- Muscles
- Gynaecology
- Gl-surgery
- Ophthalmic surgery

Contraindications:

· Where permanent support is required

Range:

- USP 4-0 to 2
- EP 1.5 to 5

Sterilization method:

EO

Packing:

- Boxes of 18 peel packs
- Cassettes





KRUUSE PGA

Shape of needle	Needle length mm	USP	EP	Length in cm	Suture colour	Number per box	Cat. No
3/8 circle, reverse cutting	26	2-0	3	70	Violet	18	152404
	30	0	3.5	70	Violet	18	152401
26 mm	30	0	3.5	90	Violet	18	152412
30 mm	30	1	4	90	Violet	18	152413
36 mm	36	1	4	70	Violet	18	152402
	36	2	5	90	Violet	18	152414
1/2 circle, round bodied, taperpoint	26	2-0	3	70	Violet	18	152403
	30	0	3.5	70	Violet	18	152400
	30	0	3.5	90	Violet	18	152409
30 mm	30	1	4	90	Violet	18	152410
36 mm	36	2	5	90	Violet	18	152411





KRUUSE PD-X

Monofilament: For smooth passage through tissue and high tissue compatibility Synthetic: Minimal tissue reaction Absorbable: By hydrolysis

KRUUSE PD-X is a monofilament synthetic suture with a smooth surface that gives minimal tissue reaction and decreased incidence of infection and trauma.

KRUUSE PD-X meets all the requirements established by the European Pharmacopoeia (EP) and the US Pharmacopoeia (USP) for Synthetic Absorbable Monofilament Surgical Sutures.

Absorption: Absorbable:

- Complete mass absorption in approximately 180-210 days
- Absorption by hydrolysis

Chemical composition:

 KRUUSE PD-X is a slowly absorbable synthetic monofilament suture, and the material is composed of Polydioxanone (PDO)

Tensile Strength:

- 75 % remains after 14 days
- 60 % remains after 28 days
- Complete mass absorption in approximately 180-210 days

Colour:

Violet

Indications:

KRUUSE PD-X is commonly used in soft tissues and ligation where absorbable sutures are indicated, including:

- Abdominal wall closure
- Gl-surgery
- Fascia and ligaments
- Tendon repair
- Hernias
- Orthopaedics
- Vascular surgery

Contraindications:

Where permanent support is required

Range:

- USP 5-0 to 2
- EP 1 to 5

Sterilization method:

• EO

Packing:

Boxes of 18 peel packs



KRUUSE PD-X

Shape of needle	Needle length mm	USP	EP	Length in cm	Suture colour	Number per box	Cat. No
3/8 circle, reverse cutting	26	2-0	3	70	Violet	18	152255
26 mm	30	0	3.5	70	Violet	18	152250
30 mm 36 mm	36	1	4	70	Violet	18	152253
1/2 circle, reverse cutting	36	2-0	3	70	Violet	18	152259
	36	0	3.5	70	Violet	18	152252
36 mm	36	1	4	70	Violet	18	152270
40 mm	40	2	5	70	Violet	18	152254
1/2 circle, round bodied, taperpoint	26	2-0	3	70	Violet	18	152256
\odot	26	0	3.5	70	Violet	18	152274
26 mm	30	0	3.5	70	Violet	18	152251
36 mm	36	1	4	70	Violet	18	152273
1/2 circle,taperpoint extra	30	2-0	3	70	Violet	18	152592
1/2 circle, round bodied, tapercut	26	2-0	3	70	Violet	18	152257
26 mm	30	0	3.5	70	Violet	18	152271
30 mm	36	2-0	3	70	Violet	18	152593
36 mm	36	0	3.5	70	Violet	18	152594
40 mm	40	0	3.5	90	Violet	18	152275
Straight, trocar point	45	0	3.5	45	Violet	18	152276
<u>A</u>	45	1	4	45	Violet	18	152277
	45	2	5	45	Violet	18	152278





KRUUSE Promilene

Monofilament: For smooth passage through tissue and high tissue compatibility **Synthetic:** For minimal tissue reaction **Non-absorbable:** Provides permanent tensile strength

KRUUSE Promilene sutures are coloured blue for easy identification during surgery. The monofilament and synthetic properties of the suture give a smooth surface, minimal tissue reaction and decreased incidence of infection and trauma. The suture is resistant to repeated bending.

Absorption:

Non-absorbable

Chemical composition:

KRUUSE Promilene is composed of an isotactic crystalline stereoisomer of polypropylene, a polymer of propylene

Colour:

• Blue

Indications:

KRUUSE Promilene is commonly used in soft tissue approximation and ligation where a permanent support is needed. Areas of use include:

- Skin closure
- Ophthalmic surgery
- Vascular and cardiovascular surgery
- Neurosurgery

Range:

- USP 4-0 to 2
- EP 1.5 to 5

Sterilization method:

• EO

Packing:

Boxes of 18 peel packs



KRUUSE Promilene

Shape of needle	Needle length mm	USP	EP	Length in cm	Suture colour	Number per box	Cat. No
3/8 circle, reverse cutting	26	2-0	3	70	Blue	18	152362
	30	0	3.5	70	Blue	18	152360
26 mm	36	2-0	3	70	Blue	18	152363
30 mm 36 mm	36	1	4	70	Blue	18	152361
48 mm	48	2	5	90	Blue	18	152369
Straight, trocar point	45	2-0	3	45	Blue	18	152530
	45	0	3.5	45	Blue	18	152531
۵	45	1	4	45	Blue	18	152532
	45	2	5	45	Blue	18	152533





KRUUSE Supramid

Pseudo-monofilament: For smooth passage through tissue, high tissue compatibility and excellent handling properties Synthetic: Minimal tissue reaction Non-absorbable: Provides permanent tensile strength

KRUUSE Supramid sutures have a twisted structure and are unique in that they are made of many fine inner nylon fibers which are enclosed in a smooth nylon outer shell. As a result, KRUUSE Supramid sutures feel smooth like monofilament sutures but they tie better, with fewer knots, and stay tied even with short tag ends.

KRUUSE Supramid is very strong and has excellent handling properties and knot security. It gives permanent tissue support with high flexibility.

Absorption:

Non-absorbable

Chemical composition:

 KRUUSE Supramid is composed of synthetic Polyamide 6.6 strands enclosed in a polyamide 6 sheet

Colour:

White and black

Indications:

KRUUSE Supramid is commonly used in soft tissue approximation and ligation where permanent support is needed. Areas of use include:

- Skin closure
- Ophthalmic surgery
- Vascular and cardiovascular surgery
- Neurosurgery

Range:

- USP 3-0 to 1
- EP 2 to 4

Sterilization method:

EO

Packing:

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- Boxes of 18 peel packs
- Cassettes





KRUUSE Supramid

Shape of needle	Needle length mm	USP	EP	Length in cm	Suture colour	Number per box	Cat. No
3/8 circle, reverse cutting	24	2-0	3	45	Black	18	152395
	26	2-0	3	70	White	18	152391
	30	2-0	3	45	Black	18	152394
24 mm	30	0	3.5	70	White	18	152390
26 mm 30 mm	39	2-0	3	70	Black	18	152393
39 mm	39	0	3.5	70	Black	18	152389
	39	1	4	70	Black	18	152388



KRUUSE Nylon

Monofilament: For smooth passage through tissue and high tissue compatibility **Synthetic:** Minimal tissue reaction

Non-absorbable: Provides permanent tensile strength

KRUUSE Nylon sutures are coloured blue for easy identification during surgery. The monofilament and synthetic properties of the suture give a smooth surface, minimal tissue reaction and decreased incidence of infection and trauma.

KRUUSE Nylon suture is quite pliable and does not support bacterial growth due to the smooth surface. The elasticity of KRUUSE Nylon suture makes it useful in retention and skin closure.

Absorption:

Non-absorbable

Chemical composition:

• KRUUSE Nylon monofilament suture is made of monofilament polyamide 6&66 by extruding a strong uniform strand.

Colour:

• Blue

Indications:

KRUUSE Nylon is commonly used in soft tissue approximation and ligation where permanent support is needed. Areas of use include:

- Skin closure
- Ophthalmic surgery
- Vascular and cardiovascular surgery
- Neurosurgery

Range:

- USP 4-0 to 1
- EP 1.5 to 4

Sterilization method:

• EO

Packing:

Boxes of 18 peel packs



KRUUSE Nylon

Shape of needle	Needle length mm	USP	EP	Length in cm	Suture colour	Number per box	Cat. No
3/8 circle, reverse cutting	24	0	3.5	70	Blue	18	152420
	26	2-0	3	70	Blue	18	152423
24 mm	30	2-0	3	90	Blue	18	152429
26 mm 30 mm	30	0	3.5	70	Blue	18	152421
36 mm	36	1	4	70	Blue	18	152422
3/8 circle, conventional cutting	90	2	5	90	Blue	18	152428
1/2 circle, reverse cutting	40	0	3.5	90	Blue	18	152426
40 mm 48 mm	48	1	4	90	Blue	18	152427
Straight cutting	55	2-0	3	90	Blue	18	152419

KRUUSE

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