



# SMI

## *BLACK LINE*

*For quality  
&  
safety*



## Why black needles ?

Metals (such as stainless steel) have a high reflectivity (> 90%), and a low penetration depth for light. These properties are responsible for the shine / glare of metals. With the help of black paint we manage to keep the reflectivity between 5 and 10%.

## Advantages

- ✓ Due to higher light penetration depth and lower reflectivity , black needles shine less under OP light
- ✓ Another advantage of the black needle is the contrast between needle and tissue - the higher contrast (light-dark) leads to better visibility
- ✓ The human eye works longer concentrated with low light reflections and high contrasts

## For use

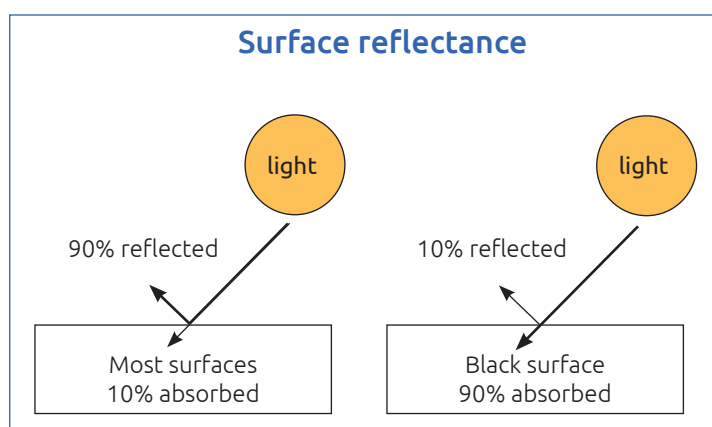
Black needles are ideally suited for all surgical situations, e.g. dental, oral mucosa surgery and as well for laparoscopic procedures

## SMI quality

With a high penetration performance and minimises tissue trauma, the black needle guarantees the same quality of all other SMI needles

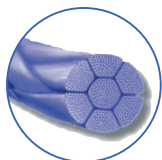
## Manufacturing

The black colour finish is made by a special surface technique



# BLACK LINE - ABSORBABLE SUTURES

## SURGICRYL® 910 POLYGLACTINE





Approximately 30 days  
wound support

**Type** Braided and coated multifilament

**Composition** Polyglactine 910, a copolymer made of 90% glycolide and 10% L-lactide

**Absorption** The hydrolytic action by which the material is broken down results in total absorption between 56 and 70 days. Between 40% and 50% of tensile strength remain after 21 days.

		Metric	USP	Length		Order number
DS 16 mm black		0.7	6/0	45 cm	<i>violet</i>	15071516VB
DS 19 mm black		1	5/0	75 cm	<i>violet</i>	15101519VB
		1.5	4/0	75 cm	<i>violet</i>	15151519VB

## SURGICRYL® RAPID POLYGLYCOLIC ACID





Approximately 10 days  
wound support

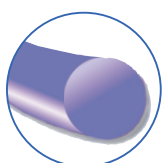
**Type** Braided and coated multifilament

**Composition** Polyglycolic acid

**Absorption** The hydrolytic action by which the material is broken down results in total absorption in approximately 42 days. Approximately 50% of tensile strength remain after 7 days.

		Metric	USP	Length		Order number
DS 16 mm black		1	5/0	75 cm	<i>undyed</i>	14101516VB
DS 19 mm black		1.5	4/0	75 cm	<i>undyed</i>	14151519VB
		2	3/0	75 cm	<i>undyed</i>	14201519VB

## SURGICRYL® MONOFAST POLYGLYCAPRONE 25





Approximately 14 days  
wound support

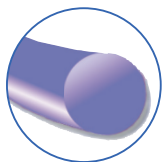
**Type** Monofilament

**Composition** Polyglactaprone 25, a copolymer made of 75% glycolide and 25% ε-caprolactone

**Absorption** 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 remain after 7 days.

		Metric	USP	Length		Order number
DS 16 mm black		1	5/0	75 cm	<i>violet</i>	16101516VB
DS 19 mm black		1	5/0	45 cm	<i>violet</i>	16101519VB
		1.5	4/0	75 cm	<i>violet</i>	16151519VB

## SURGICRYL® MONOFILAMENT POLYDIOXANONE





Approximately 60 days  
wound support

**Type** Monofilament

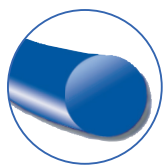
**Composition** Polydioxanone, a polymer made from polyester poly (p-dioxanone)

**Absorption** 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 remain after 42 days.



		Metric	USP	Length		Order number
DS 16 mm black		1	5/0	75 cm	<i>violet</i>	13101516VB
DS 19 mm black		1.5	4/0	75 cm	<i>violet</i>	13151519VB

# BLACK LINE - NON-ABSORBABLE SUTURES

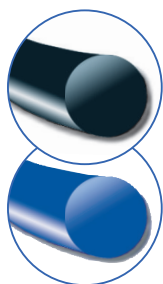
## POLYPROPYLENE BLUE





<b>Type</b>	Monofilament
<b>Composition</b>	Polypropylene, a polymer of propylene
<b>Absorption</b>	Non absorbable

		Metric	USP	Length	Order number
DS 16 mm black		1	5/0	45 cm	<i>blue</i> 5101516VB
DS 19 mm black		1	5/0	75 cm	<i>blue</i> 5101519VB
		1.5	4/0	75 cm	<i>blue</i> 5151519VB

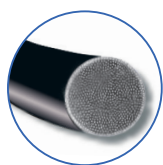
## DACLON NYLON





<b>Type</b>	Monofilament
<b>Composition</b>	Extrusion of polyamide 6.0 or 6.6
<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).

		Metric	USP	Length	Order number
DS 16 mm black		1	5/0	75 cm	<i>black</i> 9101516VB
DS 19 mm black		1	5/0	75 cm	<i>black</i> 9101519VB
		1.5	4/0	75 cm	<i>blue</i> 9151519VB

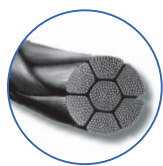
## SUPRAMID BLACK





<b>Type</b>	Twisted and coated multifilament, size 5/0 monofilament
<b>Composition</b>	Polyamide 6.6 strands enclosed in a polyamide 6 sheet
<b>Absorption</b>	Non absorbable, gradually encapsulated by connective tissue

		Metric	USP	Length	Order number
DS 16 mm black		1	5/0	75 cm	<i>black</i> 4101516VB
DS 19 mm black		1	5/0	75 cm	<i>black</i> 4101519VB
		1.5	4/0	75 cm	<i>black</i> 4151519VB

## SILK




<b>Type</b>	Braided multifilament
<b>Composition</b>	Braided fibres from the cocoon of the silkworm
<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

		Metric	USP	Length	Order number
DS 16 mm black		1	5/0	75 cm	<i>black</i> 8101516VB
		1.5	4/0	75 cm	<i>black</i> 8151516VB
DS 19 mm black		1	5/0	75 cm	<i>black</i> 8101519VB
		1.5	4/0	75 cm	<i>black</i> 8151519VB
		2	3/0	75 cm	<i>black</i> 8201519VB

## POLYESTER



<b>Type</b>	Braided multifilament
<b>Composition</b>	Polyester - a polymer of polyethylene terephthalate
<b>Absorption</b>	Non absorbable, gradually encapsulated by connective tissue

		Metric	USP	Length	Order number
DS 19 mm black		1.5	4/0	75 cm	<i>green</i> 7151519VB
		2	3/0	75 cm	<i>green</i> 7201519VB