

**PRODUCT: ALCASILK® (SILK) SURGICAL SUTURE WITH OR WITHOUT NEEDLE****1. INTRODUCTION**

**ALCASILK®** sutures are non-absorbable sterile surgical sutures which are produced from an organic protein called fibroin. This organic protein is derived from the domesticated species *Bombyx mori* of the *Bombycidae* family. **ALCASILK®** sutures are processed to remove the naturally occurring oil and to clean viscous structure. **ALCASILK®** sutures are dyed black and coated wax.

**ALCALENE®** suture is available in sterile form wounded over spool, covered with sterilization pouch.

**ALCASILK®** sutures meet all requirements for non-absorbable surgical sutures specified at the European Pharmacopoeia (EP) and United States Pharmacopoeia (USP).

**2. CHEMICAL COMPOSITION****2.1. SURGICAL SUTURE**

|           |                                                                                                                                                                                       |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material  | : Natural silk fiber called fibroin. This fibroin protein is obtained from <i>Bombyx mori</i> of the <i>Bombycidae</i> family                                                         |
| Name      | : Silk                                                                                                                                                                                |
| Colour    | : HEMATINE HCKS 21                                                                                                                                                                    |
| Dyestuffs | : HEMATINE HCKS 21:<br>EC number: 290-977-1<br>Chemical characterization: Substances<br>CAS-No. Description Oxidized Logwood extract<br>Identification number(s) EC number: 290-977-1 |
| Coating   | : KAHLWAX 1540                                                                                                                                                                        |

## 2.2. SURGICAL NEEDLE

### 2.2.1. Specification for SS Wire Grade 'AISI 302'

#### Chemical Composition

| C<br>(max%) | Mn<br>(max%) | P<br>(max%) | S<br>(max%) | Si<br>(max%) | Cr<br>(%) | Ni<br>(%) | N<br>(max%) | Fe<br>(%) |
|-------------|--------------|-------------|-------------|--------------|-----------|-----------|-------------|-----------|
| 0,12        | 2            | 0,045       | 0,03        | 1            | 17-19     | 8-10      | 0,10        | Balance   |

### 2.2.2. Specification for SS Wire Grade AISI 420

#### Chemical Composition

| C (max %)  | Mn (max %) | P (max %) | S (max %) | Si (max %) | Cr(min %) |
|------------|------------|-----------|-----------|------------|-----------|
| 0,29       | 1          | 0,040     | 0,03      | 1          | 12,5      |
| Ni (max %) |            | Fe        |           |            |           |
| 0,6        |            | Balance   |           |            |           |

### 3. PACKAGING INFORMATION

| TYVEK 2FS | PROPERTIES                                          | UNIT                | TYPICAL VALUE |
|-----------|-----------------------------------------------------|---------------------|---------------|
|           | DELAMINATION                                        | N/2.54 cm           | 2,7           |
|           | BASIC WEIGHT                                        | g/m <sup>2</sup>    | 60            |
|           | POROSITY                                            | sec                 | 22            |
|           | OPACITY                                             | %                   | 94            |
|           | THICKNESS                                           | mils                | 155           |
|           | SPENCER PUNCTURE                                    | J/m                 | 5254          |
|           | MULLEN BURST                                        | kPa                 | 925           |
|           | HYDROSTATIC HEAD                                    | cm H <sub>2</sub> O | 145           |
|           | ELMENDORF TEAR, XD                                  | mN                  | 3694          |
|           | ELMENDORF TEAR, MD                                  | mN                  | 2803          |
|           | TENSILE STRENGTH,XD                                 | N/2.54 cm           | 157           |
|           | TENSILE STRENGTH,MD                                 | N/2.54 cm           | 156           |
|           | FREE FROM LEAD AND HEAVY METALS AND TOXIC MATERIALS |                     |               |

| LAMINATED FILM                                      | PROPERTIES   | UNIT       | STANDARD OR TEST METHOD | TYPICAL VALUE |        |
|-----------------------------------------------------|--------------|------------|-------------------------|---------------|--------|
|                                                     | THICKNESS    | Micron     | ASTM D 374              | LAM.FILM      | 55 ± 5 |
|                                                     |              |            |                         | PE            | 40 ± 5 |
|                                                     |              |            |                         | PET           | 12 ± 2 |
|                                                     | COF          | F/M        | ASTM F 1894             | 0,30-0,35     |        |
|                                                     |              | M/M        |                         | 0,35-0,40     |        |
|                                                     | THERMAL SEAL | °C         | ASTM F 88               | 110 ± 5       |        |
|                                                     | TEAR         | G MD<br>TD | D1922                   | 50 ± 5        |        |
|                                                     |              |            |                         | 60 ± 5        |        |
|                                                     | GLOSS        | %          | ASTMD 2457              | 60 ± 5        |        |
| FREE FROM LEAD AND HEAVY METALS AND TOXIC MATERIALS |              |            |                         |               |        |

### PRODUCT SPECIFICATIONS

| REEL | PROPERTIES            | UNIT                      | STANDARD OR TEST METHOD | TYPICAL VALUE                   |            |
|------|-----------------------|---------------------------|-------------------------|---------------------------------|------------|
|      | SEAL STRENGTH         | cm                        | ASTM F 88               | < 25                            | ≥ 25       |
|      |                       | Edge Seal (gr /15 mm) (N) |                         | 3,0 ± 0,5                       | 4,0 ± 0,75 |
|      | BUBBLE TEST           |                           | ASTM F2096-04           | None                            |            |
|      | PINHOLE DETERMINATION |                           | EN 868-5 Annex C        | None                            |            |
|      | DIMENSION CONTROL     | cm or mm                  | ASTM F2203-02           | Desired dimensions              |            |
|      | LEAKAGE TEST          |                           | ASTM F1929-98           | None                            |            |
|      | PEEL DIRECTION        |                           | EN 868-5 Annex E        | Must not break the particle     |            |
|      | INDICATOR CONTROL     |                           | ISO 11140-1             | Must return the specified color |            |

| INDICATOR | STERILIZATION METHOD | BEFORE STERILIZATION | AFTER STERILIZATION |
|-----------|----------------------|----------------------|---------------------|
|           | VH2O2                | Red/Pink             | Yellow              |

**4. SHELF LIFE**

5 years (stability duration after sterilization)

**5. STORAGE CONDITIONS**

Recommended storage conditions: Store between 5 - 25°C, away from moisture and direct heat.

Do not use after expiry date!

Protect from humidity.

**6. STERILIZATION METHOD**

**ALCASILK®** sutures are sterilized by Ethylene Oxide. Sterility is controlled via bio-indicators after each sterilization process.

Do not re-sterilize!

Do not use if package is opened or damaged!

Discard opened unused sutures.

**PRODUCT: ALCASORB® (POLYGLYCOLIC ACID) SURGICAL SUTURE WITH OR WITHOUT NEEDLE**

## 1. INTRODUCTION

**ALCASORB®** suture is a synthetic absorbable, braided, coated suture composed of polyglycolic acid (PGA) and is available dyed violet. Only FDA-approved colour additives such as D&C Violet No. 2 are used.

**ALCASORB®** suture is available in sterile form wounded over spool, covered with aluminium pouch.

**ALCASORB®** suture meets all the requirements established by the United States Pharmacopoeia (USP) and the European Pharmacopoeia (EP) for Synthetic Absorbable Surgical Sutures.

## 2. CHEMICAL COMPOSITION

### 2.1. SURGICAL SUTURE

|                              |                                                                                                                                                                                                         |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name                         | : Polyglycolic acid                                                                                                                                                                                     |
| Formula of Polyglycolic acid | : $(C_2H_2O_2)_n$<br>$(-O-CH_2-CO-O-CH_2-CO-)_n$                                                                                                                                                        |
| Content of residues          | : Monomer (Glycolide) $\leq 1$ wt. %<br>: Catalyst (Tin) $\leq 50$ ppm<br>: Heavy metal $\leq 10$ ppm<br>: Residual solvents $\leq 500$ ppm<br>: Stabilizing agents none<br>: Antioxidizing agents none |

### DYESTUFF

|                     |                                                                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------|
| Name                | : D&C Violet No. 2                                                                                     |
| Chemical Name       | : 1-hydroxy-4-p-toluidinoantraquinone<br>(IUPAC name 1-hydroxy-4-(p-tolylamino) anthracene-9,10-dione) |
| Formula             | : $C_{21}H_{15}NO_3$                                                                                   |
| C.I. Number         | : 60725 / Solvent Violet 13                                                                            |
| Dyeing process      | : Dyeing in polymer                                                                                    |
| Content of dyestuff | : $< 0.2$ wt%                                                                                          |

### COATING MATERIAL

|                             |                                                                                             |
|-----------------------------|---------------------------------------------------------------------------------------------|
| Name                        | : Polycaprolactone + Calcium Stearate                                                       |
| Formula                     | : $(C_6H_{10}O_2)_n C_{36}H_{70}O_4Ca$<br>$[(CH_2)_5-CO-O]_n + [CH_3-(CH_2)_{16}-CO-O]_2Ca$ |
| Content of coating material | : 1~5wt% (depending on suture size)                                                         |

## 2.2. SURGICAL NEEDLE

### 2.2.1. Specification for SS Wire Grade 'AISI 302'

#### Chemical Composition

| C<br>(max%) | Mn<br>(max%) | P<br>(max%) | S<br>(max%) | Si<br>(max%) | Cr<br>(%) | Ni<br>(%) | N<br>(max%) | Fe<br>(%) |
|-------------|--------------|-------------|-------------|--------------|-----------|-----------|-------------|-----------|
| 0,12        | 2            | 0,045       | 0,03        | 1            | 17-19     | 8-10      | 0,10        | Balance   |

### 2.2.2. Specification for SS Wire Grade AISI 420

#### Chemical Composition

| C (max %)  | Mn (max %) | P (max %) | S (max %) | Si (max %) | Cr (min %) |
|------------|------------|-----------|-----------|------------|------------|
| 0,29       | 1          | 0,040     | 0,03      | 1          | 12,5       |
| Ni (max %) |            | Fe        |           |            |            |
| 0,6        |            | Balance   |           |            |            |

### 3. PACKAGING INFORMATION (ALUMINIUM POUCH) (TOP)

| Properties                                                 |    | Unit                     | Value              |
|------------------------------------------------------------|----|--------------------------|--------------------|
| Composition                                                |    |                          |                    |
| Lacquer                                                    |    | g/m <sup>2</sup>         | 3                  |
| PET 12 Microns                                             |    | g/m <sup>2</sup>         | 17                 |
| Color band & White Ink                                     |    | g/m <sup>2</sup>         | 3                  |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| PET 12 Microns                                             |    | g/m <sup>2</sup>         | 17                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| Aluminium 30 Microns                                       |    | g/m <sup>2</sup>         | 82                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| White Peel 30 Microns                                      |    | g/m <sup>2</sup>         | 27                 |
| Total Weight                                               |    | g/m <sup>2</sup>         | 158                |
| Yield                                                      |    | m <sup>2</sup> /Kg       | 6.32               |
| Mechanical Properties                                      |    |                          |                    |
| Tensile Strength                                           | MD | N/cm                     | >30                |
|                                                            | CD | N/cm                     | >30                |
| Elongation                                                 | MD | %                        | 10                 |
|                                                            | CD | %                        | 10                 |
| Tear Resistance                                            | MD | mN                       | 150                |
|                                                            | CD | mN                       | 200                |
| Puncture Resistance ASTM                                   |    | N/8mm <sup>2</sup>       | 60                 |
| Barrier Properties                                         |    |                          |                    |
| Water Vapour Transmission Rate (WVTR @ 38°C & 90%RH)       |    | g/m <sup>2</sup> .d      | <0.1*              |
| Oxygen Transmission Rate (OTR @ 23°C & 60%RH)              |    | ml/m <sup>2</sup> .d.atm | <0.1*              |
| Seal Properties                                            |    |                          |                    |
| Seal behaviour: against itself @ 140°C, 1s, 2 bar T - peel |    | N/cm                     | Peel Strength<br>5 |
| Suggested parameters of use                                |    |                          |                    |
| Seal Range - Temperature                                   |    | °C                       | 120-200            |
| Seal Range - Dwell Time                                    |    | s                        | 0.5-2.0            |
| Seal Range - Seal pressure                                 |    | bar                      | 2.0-5.0            |
| Thermoforming Temperature                                  |    | °C                       | n.a                |

(BOTTOM)

| Properties                                                 |    | Unit                     | Value              |
|------------------------------------------------------------|----|--------------------------|--------------------|
| Composition                                                |    |                          |                    |
| OPA 25 Microns                                             |    | g/m <sup>2</sup>         | 34                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 5                  |
| Aluminium 45 Microns                                       |    | g/m <sup>2</sup>         | 124                |
| ADH                                                        |    | g/m <sup>2</sup>         | 5                  |
| White Peel 30 Microns                                      |    | g/m <sup>2</sup>         | 27                 |
| Total Weight                                               |    | g/m <sup>2</sup>         | 198                |
| Yield                                                      |    | m <sup>2</sup> /Kg       | 5.05               |
| Mechanical Properties                                      |    |                          |                    |
| Tensile Strength                                           | MD | N/cm                     | >30                |
|                                                            | CD | N/cm                     | >35                |
| Elongation                                                 | MD | %                        | 70                 |
|                                                            | CD | %                        | 80                 |
| Tear Resistance                                            | MD | mN                       | 800                |
|                                                            | CD | mN                       | 800                |
| Puncture Resistance ASTM                                   |    | N/8mm <sup>2</sup>       | 60                 |
| Barrier Properties                                         |    |                          |                    |
| Water Vapour Transmission Rate (WVTR @ 38°C & 90%RH)       |    | g/m <sup>2</sup> .d      | <0.1*              |
| Oxygen Transmission Rate (OTR @ 23°C & 60%RH)              |    | ml/m <sup>2</sup> .d.atm | <0.1*              |
| Seal Properties                                            |    |                          |                    |
| Seal behaviour: against itself @ 140°C, 1s, 2 bar T - peel |    | N/cm                     | Peel Strength<br>5 |
| Suggested parameters of use                                |    |                          |                    |
| Seal Range - Temperature                                   |    | °C                       | 120-200            |
| Seal Range - Dwell Time                                    |    | s                        | 0.5-2.0            |
| Seal Range - Seal pressure                                 |    | bar                      | 2.0-5.0            |
| Thermoforming Temperature                                  |    | °C                       | 90                 |

#### 4. SHELF LIFE

5 years (stability duration after sterilization)

#### 5. STORAGE CONDITIONS

Recommended storage conditions: Store between 5 - 25°C, away from moisture and direct heat.

Do not use after expiry date!

Protect from humidity.

#### 6. STERILIZATION METHOD

**ALCASORB®** sutures are sterilized by Ethylene Oxide. Sterility is controlled via bio-indicators after each sterilization process.

Do not re-sterilize!

Do not use if package is opened or damaged!

Discard opened unused sutures.

# PRODUCT: ALCASORB® RAPID (POLYGLYCOLIC ACID RAPID) SURGICAL SUTURE WITH OR WITHOUT NEEDLE

## 1. INTRODUCTION

ALCASORB® RAPID suture is a synthetic absorbable, braided, coated suture composed of polyglycolic acid (PGA) and is available undyed. The undyed suture is beige in colour.

ALCASORB® RAPID suture is available in sterile form wounded over spool, covered with aluminium pouch.

ALCASORB® RAPID suture meets all the requirements established by the United States Pharmacopoeia (USP) and the European Pharmacopoeia (EP) for Synthetic Absorbable Surgical Sutures.

## 2. CHEMICAL COMPOSITION

### 2.1. SURGICAL SUTURE

|                              |                                                                                                                                                                                                         |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name                         | : Polyglycolic acid                                                                                                                                                                                     |
| Formula of Polyglycolic acid | : $(C_2H_2O_2)_n$<br>$(-O-CH_2-CO-O-CH_2-CO-)_n$                                                                                                                                                        |
| Content of residues          | : Monomer (Glycolide) $\leq 1$ wt. %<br>: Catalyst (Tin) $\leq 50$ ppm<br>: Heavy metal $\leq 10$ ppm<br>: Residual solvents $\leq 500$ ppm<br>: Stabilizing agents none<br>: Antioxidizing agents none |

### COATING MATERIAL

|                             |                                                                                             |
|-----------------------------|---------------------------------------------------------------------------------------------|
| Name                        | : Polycaprolactone + Calcium Stearate                                                       |
| Formula                     | : $(C_6H_{10}O_2)_n C_{36}H_{70}O_4Ca$<br>$[(CH_2)_5-CO-O]_n + [CH_3-(CH_2)_{16}-CO-O]_2Ca$ |
| Content of coating material | : 1~5wt% (depending on suture size)                                                         |

## 2.2. SURGICAL NEEDLE

### 2.2.1. Specification for SS Wire Grade 'AISI 302'

#### Chemical Composition

| C<br>(max%) | Mn<br>(max%) | P<br>(max%) | S<br>(max%) | Si<br>(max%) | Cr<br>(%) | Ni<br>(%) | N<br>(max%) | Fe<br>(%) |
|-------------|--------------|-------------|-------------|--------------|-----------|-----------|-------------|-----------|
| 0,12        | 2            | 0,045       | 0,03        | 1            | 17-19     | 8-10      | 0,10        | Balance   |

### 2.2.2. Specification for SS Wire Grade AISI 420

#### Chemical Composition

| C (max %)  | Mn (max %) | P (max %) | S (max %) | Si (max %) | Cr (min %) |
|------------|------------|-----------|-----------|------------|------------|
| 0,29       | 1          | 0,040     | 0,03      | 1          | 12,5       |
| Ni (max %) |            | Fe        |           |            |            |
| 0,6        |            | Balance   |           |            |            |

### 3. PACKAGING INFORMATION

(ALUMINIUM POUCH)  
(TOP)

| Properties                                                 |    | Unit                     | Value              |
|------------------------------------------------------------|----|--------------------------|--------------------|
| Composition                                                |    |                          |                    |
| Lacquer                                                    |    | g/m <sup>2</sup>         | 3                  |
| PET 12 Microns                                             |    | g/m <sup>2</sup>         | 17                 |
| Color band & White Ink                                     |    | g/m <sup>2</sup>         | 3                  |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| PET 12 Microns                                             |    | g/m <sup>2</sup>         | 17                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| Aluminium 30 Microns                                       |    | g/m <sup>2</sup>         | 82                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| White Peel 30 Microns                                      |    | g/m <sup>2</sup>         | 27                 |
| Total Weight                                               |    | g/m <sup>2</sup>         | 158                |
| Yield                                                      |    | m <sup>2</sup> /Kg       | 6.32               |
| Mechanical Properties                                      |    |                          |                    |
| Tensile Strength                                           | MD | N/cm                     | >30                |
|                                                            | CD | N/cm                     | >30                |
| Elongation                                                 | MD | %                        | 10                 |
|                                                            | CD | %                        | 10                 |
| Tear Resistance                                            | MD | mN                       | 150                |
|                                                            | CD | mN                       | 200                |
| Puncture Resistance ASTM                                   |    | N/8mm <sup>2</sup>       | 60                 |
| Barrier Properties                                         |    |                          |                    |
| Water Vapour Transmission Rate (WVTR @ 38°C & 90%RH)       |    | g/m <sup>2</sup> .d      | <0.1*              |
| Oxygen Transmission Rate (OTR @ 23°C & 60%RH)              |    | ml/m <sup>2</sup> .d.atm | <0.1*              |
| Seal Properties                                            |    |                          |                    |
| Seal behaviour: against itself @ 140°C, 1s, 2 bar T - peel |    | N/cm                     | Peel Strength<br>5 |
| Suggested parameters of use                                |    |                          |                    |
| Seal Range - Temperature                                   |    | °C                       | 120-200            |
| Seal Range - Dwell Time                                    |    | s                        | 0.5-2.0            |
| Seal Range - Seal pressure                                 |    | bar                      | 2.0-5.0            |
| Thermoforming Temperature                                  |    | °C                       | n.a                |

(BOTTOM)

| Properties                                                 |    | Unit                     | Value              |
|------------------------------------------------------------|----|--------------------------|--------------------|
| Composition                                                |    |                          |                    |
| OPA 25 Microns                                             |    | g/m <sup>2</sup>         | 34                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 5                  |
| Aluminium 45 Microns                                       |    | g/m <sup>2</sup>         | 124                |
| ADH                                                        |    | g/m <sup>2</sup>         | 5                  |
| White Peel 30 Microns                                      |    | g/m <sup>2</sup>         | 27                 |
| Total Weight                                               |    | g/m <sup>2</sup>         | 198                |
| Yield                                                      |    | m <sup>2</sup> /Kg       | 5.05               |
| Mechanical Properties                                      |    |                          |                    |
| Tensile Strength                                           | MD | N/cm                     | >30                |
|                                                            | CD | N/cm                     | >35                |
| Elongation                                                 | MD | %                        | 70                 |
|                                                            | CD | %                        | 80                 |
| Tear Resistance                                            | MD | mN                       | 800                |
|                                                            | CD | mN                       | 800                |
| Puncture Resistance ASTM                                   |    | N/8mm <sup>2</sup>       | 60                 |
| Barrier Properties                                         |    |                          |                    |
| Water Vapour Transmission Rate (WVTR @ 38°C & 90%RH)       |    | g/m <sup>2</sup> .d      | <0.1*              |
| Oxygen Transmission Rate (OTR @ 23°C & 60%RH)              |    | ml/m <sup>2</sup> .d.atm | <0.1*              |
| Seal Properties                                            |    |                          |                    |
| Seal behaviour: against itself @ 140°C, 1s, 2 bar T - peel |    | N/cm                     | Peel Strength<br>5 |
| Suggested parameters of use                                |    |                          |                    |
| Seal Range - Temperature                                   |    | °C                       | 120-200            |
| Seal Range - Dwell Time                                    |    | s                        | 0.5-2.0            |
| Seal Range - Seal pressure                                 |    | bar                      | 2.0-5.0            |
| Thermoforming Temperature                                  |    | °C                       | 90                 |

#### 4. SHELF LIFE

5 years (stability duration after sterilization)

#### 5. STORAGE CONDITIONS

Recommended storage conditions: Store between 5 - 25°C, away from moisture and direct heat.

Do not use after expiry date!

Protect from humidity.

#### **6. STERILIZATION METHOD**

**ALCASORB® RAPID** sutures are sterilized by Gamma irradiation.

Do not re-sterilize!

Do not use if package is opened or damaged!

Discard opened unused sutures.

**PRODUCT: ALCADINONE® (POLYDIOXANONE) SURGICAL SUTURE WITH OR WITHOUT NEEDLE**
**1. INTRODUCTION**

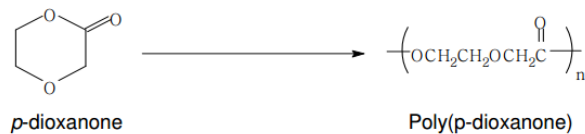
**ALCADINONE®** is a synthetic absorbable monofilament suture composed of poly (p-dioxanone) and is available dyed violet. Only FDA-approved colour additives such as D&C Violet No. 2 are used.

**ALCADINONE®** suture is available in sterile form wounded over spool, covered with aluminium pouch.

**ALCADINONE®** suture meets all the requirements of the European Pharmacopoeia (EP) for Synthetic Absorbable Monofilament Sutures.

**2. CHEMICAL COMPOSITION**
**2.1. SURGICAL SUTURE**

Name : Poly (p-dioxanone)  
Formula :



|                     |                                  |           |
|---------------------|----------------------------------|-----------|
| Content of residues | : Monomer ( <i>p</i> -dioxanone) | ≤ 1 wt. % |
|                     | : Catalyst (Tin)                 | ≤ 100ppm  |
|                     | : Heavy Metal                    | ≤ 10ppm   |
|                     | : Stabilizing agents             | none      |
|                     | : Antioxidizing agents           | none      |

**DYESTUFF**

|                     |                                                                                                                              |
|---------------------|------------------------------------------------------------------------------------------------------------------------------|
| Name                | : D&C Violet No. 2                                                                                                           |
| Chemical Name       | : 1-Hydroxy-4- <i>p</i> -toluidinoantraquinone<br><br>(IUPAC name: 1-hydroxy-4-( <i>p</i> -tolylamino)anthracene-9,10-dione) |
| Formula             | : C <sub>21</sub> H <sub>15</sub> NO <sub>3</sub>                                                                            |
| C.I. Number         | : 60725 / Solvent Violet 13                                                                                                  |
| Reference           | : 21 CFR 74, 3602                                                                                                            |
| Dyeing process      | : Dyeing in polymer                                                                                                          |
| Content of dyestuff | : < 0.1wt%                                                                                                                   |
| Undyed Suture       | : None                                                                                                                       |

## 2.2. SURGICAL NEEDLE

### 2.2.1. Specification for SS Wire Grade 'AISI 302'

#### Chemical Composition

| C<br>(max%) | Mn<br>(max%) | P<br>(max%) | S<br>(max%) | Si<br>(max%) | Cr<br>(%) | Ni<br>(%) | N<br>(max%) | Fe<br>(%) |
|-------------|--------------|-------------|-------------|--------------|-----------|-----------|-------------|-----------|
| 0,12        | 2            | 0,045       | 0,03        | 1            | 17-19     | 8-10      | 0,10        | Balance   |

### 2.2.2. Specification for SS Wire Grade AISI 420

#### Chemical Composition

| C (max %)  | Mn (max %) | P (max %) | S (max %) | Si (max %) | Cr (min %) |
|------------|------------|-----------|-----------|------------|------------|
| 0,29       | 1          | 0,040     | 0,03      | 1          | 12,5       |
| Ni (max %) |            | Fe        |           |            |            |
| 0,6        |            | Balance   |           |            |            |

### 3. PACKAGING INFORMATION (ALUMINIUM POUCH) (TOP)

| Properties                                                 | Unit                     | Value              |
|------------------------------------------------------------|--------------------------|--------------------|
| <b>Composition</b>                                         |                          |                    |
| Lacquer                                                    | g/m <sup>2</sup>         | 3                  |
| PET 12 Microns                                             | g/m <sup>2</sup>         | 17                 |
| Color band & White Ink                                     | g/m <sup>2</sup>         | 3                  |
| ADH                                                        | g/m <sup>2</sup>         | 3                  |
| PET 12 Microns                                             | g/m <sup>2</sup>         | 17                 |
| ADH                                                        | g/m <sup>2</sup>         | 3                  |
| Aluminium 30 Microns                                       | g/m <sup>2</sup>         | 82                 |
| ADH                                                        | g/m <sup>2</sup>         | 3                  |
| White Peel 30 Microns                                      | g/m <sup>2</sup>         | 27                 |
| Total Weight                                               | g/m <sup>2</sup>         | 158                |
| Yield                                                      | m <sup>2</sup> /Kg       | 6.32               |
| <b>Mechanical Properties</b>                               |                          |                    |
| Tensile Strength                                           | MD<br>CD                 | N/cm<br>N/cm       |
|                                                            |                          | >30<br>>30         |
| Elongation                                                 | MD<br>CD                 | %<br>%             |
|                                                            |                          | 10<br>10           |
| Tear Resistance                                            | MD<br>CD                 | mN<br>mN           |
|                                                            |                          | 150<br>200         |
| Puncture Resistance ASTM                                   |                          | N/8mm <sup>2</sup> |
|                                                            |                          | 60                 |
| <b>Barrier Properties</b>                                  |                          |                    |
| Water Vapour Transmission Rate (WVTR @ 38°C & 90%RH)       | g/m <sup>2</sup> .d      | <0.1*              |
| Oxygen Transmission Rate (OTR @ 23°C & 60%RH)              | ml/m <sup>2</sup> .d.atm | <0.1*              |
| <b>Seal Properties</b>                                     |                          |                    |
| Seal behaviour: against itself @ 140°C, 1s, 2 bar T - peel | N/cm                     | Peel Strength<br>5 |
| <b>Suggested parameters of use</b>                         |                          |                    |
| Seal Range - Temperature                                   | °C                       | 120-200            |
| Seal Range - Dwell Time                                    | s                        | 0.5-2.0            |
| Seal Range - Seal pressure                                 | bar                      | 2.0-5.0            |
| Thermoforming Temperature                                  | °C                       | n.a                |

(BOTTOM)

| Properties                                                 |    | Unit                     | Value              |
|------------------------------------------------------------|----|--------------------------|--------------------|
| Composition                                                |    |                          |                    |
| OPA 25 Microns                                             |    | g/m <sup>2</sup>         | 34                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 5                  |
| Aluminium 45 Microns                                       |    | g/m <sup>2</sup>         | 124                |
| ADH                                                        |    | g/m <sup>2</sup>         | 5                  |
| White Peel 30 Microns                                      |    | g/m <sup>2</sup>         | 27                 |
| Total Weight                                               |    | g/m <sup>2</sup>         | 198                |
| Yield                                                      |    | m <sup>2</sup> /Kg       | 5.05               |
| Mechanical Properties                                      |    |                          |                    |
| Tensile Strength                                           | MD | N/cm                     | >30                |
|                                                            | CD | N/cm                     | >35                |
| Elongation                                                 | MD | %                        | 70                 |
|                                                            | CD | %                        | 80                 |
| Tear Resistance                                            | MD | mN                       | 800                |
|                                                            | CD | mN                       | 800                |
| Puncture Resistance ASTM                                   |    | N/8mm <sup>2</sup>       | 60                 |
| Barrier Properties                                         |    |                          |                    |
| Water Vapour Transmission Rate (WVTR @ 38°C & 90%RH)       |    | g/m <sup>2</sup> .d      | <0.1*              |
| Oxygen Transmission Rate (OTR @ 23°C & 60%RH)              |    | ml/m <sup>2</sup> .d.atm | <0.1*              |
| Seal Properties                                            |    |                          |                    |
| Seal behaviour: against itself @ 140°C, 1s, 2 bar T - peel |    | N/cm                     | Peel Strength<br>5 |
| Suggested parameters of use                                |    |                          |                    |
| Seal Range - Temperature                                   |    | °C                       | 120-200            |
| Seal Range - Dwell Time                                    |    | s                        | 0.5-2.0            |
| Seal Range - Seal pressure                                 |    | bar                      | 2.0-5.0            |
| Thermoforming Temperature                                  |    | °C                       | 90                 |

#### 4. SHELF LIFE

5 years (stability duration after sterilization)

#### 5. STORAGE CONDITIONS

Recommended storage conditions: Store between 5 - 25°C, away from moisture and direct heat.

Do not use after expiry date!

Protect from humidity.

#### 6. STERILIZATION METHOD

**ALCADINONE®** sutures are sterilized by Ethylene Oxide. Sterility is controlled via bio-indicators after each sterilization process.

Do not re-sterilize!

Do not use if package is opened or damaged!

Discard opened unused sutures.

**PRODUCT: ALCALACTINE® (POLY[GLYCOLIC ACID(90%)- CO-LACTIC ACID(10%)]) SURGICAL SUTURE WITH OR WITHOUT NEEDLE**

## 1. INTRODUCTION

**ALCALACTINE®** suture is a synthetic absorbable, braided, coated suture composed of a copolymer made from 90% glycolide and 10% L-lactide and is available dyed violet. Only FDA-approved colour additives such as D&C violet no:2 are used.

**ALCALACTINE®** suture is available in sterile form wounded over spool, covered with aluminium pouch.

**ALCALACTINE®** suture meets all the requirements established by the United States Pharmacopoeia (USP) and the European Pharmacopoeia (EP) for Synthetic Absorbable Surgical Sutures except for diameters which are slightly oversized in some sizes.

## 2. CHEMICAL COMPOSITION

### 2.1. SURGICAL SUTURE

|                                          |                                          |
|------------------------------------------|------------------------------------------|
| Name                                     | : Poly (glycolide- co-/l-lactide)(90/10) |
| Formula of Poly (glycolide-co-L-lactide) | : $(C_2H_2O_2)_m(C_3H_4O_2)_n$           |
| Content of residues                      | : Monomer (Glycolide) $\leq 1$ wt. %     |
|                                          | : Catalyst (Tin) $\leq 50$ ppm           |
|                                          | : Heavy metal $\leq 10$ ppm              |
|                                          | : Residual Solvents $\leq 500$ ppm       |
|                                          | : Stabilizing agents none                |
|                                          | : Antioxidizing agents none              |

### DYESTUFF

|                     |                                                                                                                          |
|---------------------|--------------------------------------------------------------------------------------------------------------------------|
| Name                | : D&C Violet No. 2                                                                                                       |
| Chemical Name       | : 1-Hydroxy-4- <i>p</i> -toluidinoantraquinone<br>(IUPAC name 1-hydroxy-4-( <i>p</i> -tolylamino) anthracene-9,10-dione) |
| Formula             | : $C_{21}H_{15}NO_3$                                                                                                     |
| C.I. Number         | : 60725 / Solvent Violet 13                                                                                              |
| Reference           | : 21 CFR 74, 3602                                                                                                        |
| Dyeing process      | : Dyeing in polymer                                                                                                      |
| Content of dyestuff | : < 0.2 wt%                                                                                                              |

### COATING MATERIAL

|                             |                                                         |
|-----------------------------|---------------------------------------------------------|
| Name                        | : Poly(glycolide-co-lactide) (30/70) + Calcium Stearate |
| Formula                     | : $(C_2H_2O_2)_m(C_3H_4O_2)_n + C_{36}H_{70}O_4Ca$      |
| Content of coating material | : 1~5wt% (depending on suture size)                     |

## 2.2. SURGICAL NEEDLE

### 2.2.1. Specification for SS Wire Grade 'AISI 302'

#### Chemical Composition

| C<br>(max%) | Mn<br>(max%) | P<br>(max%) | S<br>(max%) | Si<br>(max%) | Cr<br>(%) | Ni<br>(%) | N<br>(max%) | Fe<br>(%) |
|-------------|--------------|-------------|-------------|--------------|-----------|-----------|-------------|-----------|
| 0,12        | 2            | 0,045       | 0,03        | 1            | 17-19     | 8-10      | 0,10        | Balance   |

### 2.2.2. Specification for SS Wire Grade AISI 420

#### Chemical Composition

| C (max %)  | Mn (max %) | P (max %) | S (max %) | Si (max %) | Cr (min %) |
|------------|------------|-----------|-----------|------------|------------|
| 0,29       | 1          | 0,040     | 0,03      | 1          | 12,5       |
| Ni (max %) |            | Fe        |           |            |            |
| 0,6        |            | Balance   |           |            |            |

### 3. PACKAGING INFORMATION (ALUMINIUM POUCH) (TOP)

| Properties                                                 |    | Unit                     | Value              |
|------------------------------------------------------------|----|--------------------------|--------------------|
| Composition                                                |    |                          |                    |
| Lacquer                                                    |    | g/m <sup>2</sup>         | 3                  |
| PET 12 Microns                                             |    | g/m <sup>2</sup>         | 17                 |
| Color band & White Ink                                     |    | g/m <sup>2</sup>         | 3                  |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| PET 12 Microns                                             |    | g/m <sup>2</sup>         | 17                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| Aluminium 30 Microns                                       |    | g/m <sup>2</sup>         | 82                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| White Peel 30 Microns                                      |    | g/m <sup>2</sup>         | 27                 |
| Total Weight                                               |    | g/m <sup>2</sup>         | 158                |
| Yield                                                      |    | m <sup>2</sup> /Kg       | 6.32               |
| Mechanical Properties                                      |    |                          |                    |
| Tensile Strength                                           | MD | N/cm                     | >30                |
|                                                            | CD | N/cm                     | >30                |
| Elongation                                                 | MD | %                        | 10                 |
|                                                            | CD | %                        | 10                 |
| Tear Resistance                                            | MD | mN                       | 150                |
|                                                            | CD | mN                       | 200                |
| Puncture Resistance ASTM                                   |    | N/8mm <sup>2</sup>       | 60                 |
| Barrier Properties                                         |    |                          |                    |
| Water Vapour Transmission Rate (WVTR @ 38°C & 90%RH)       |    | g/m <sup>2</sup> .d      | <0.1*              |
| Oxygen Transmission Rate (OTR @ 23°C & 60%RH)              |    | ml/m <sup>2</sup> .d.atm | <0.1*              |
| Seal Properties                                            |    |                          |                    |
| Seal behaviour: against itself @ 140°C, 1s, 2 bar T - peel |    | N/cm                     | Peel Strength<br>5 |
| Suggested parameters of use                                |    |                          |                    |
| Seal Range - Temperature                                   |    | °C                       | 120-200            |
| Seal Range - Dwell Time                                    |    | s                        | 0.5-2.0            |
| Seal Range - Seal pressure                                 |    | bar                      | 2.0-5.0            |
| Thermoforming Temperature                                  |    | °C                       | n.a                |

(BOTTOM)

| Properties                                                 |    | Unit                     | Value              |
|------------------------------------------------------------|----|--------------------------|--------------------|
| Composition                                                |    |                          |                    |
| OPA 25 Microns                                             |    | g/m <sup>2</sup>         | 34                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 5                  |
| Aluminium 45 Microns                                       |    | g/m <sup>2</sup>         | 124                |
| ADH                                                        |    | g/m <sup>2</sup>         | 5                  |
| White Peel 30 Microns                                      |    | g/m <sup>2</sup>         | 27                 |
| Total Weight                                               |    | g/m <sup>2</sup>         | 198                |
| Yield                                                      |    | m <sup>2</sup> /Kg       | 5.05               |
| Mechanical Properties                                      |    |                          |                    |
| Tensile Strength                                           | MD | N/cm                     | >30                |
|                                                            | CD | N/cm                     | >35                |
| Elongation                                                 | MD | %                        | 70                 |
|                                                            | CD | %                        | 80                 |
| Tear Resistance                                            | MD | mN                       | 800                |
|                                                            | CD | mN                       | 800                |
| Puncture Resistance ASTM                                   |    | N/8mm <sup>2</sup>       | 60                 |
| Barrier Properties                                         |    |                          |                    |
| Water Vapour Transmission Rate (WVTR @ 38°C & 90%RH)       |    | g/m <sup>2</sup> .d      | <0.1*              |
| Oxygen Transmission Rate (OTR @ 23°C & 60%RH)              |    | ml/m <sup>2</sup> .d.atm | <0.1*              |
| Seal Properties                                            |    |                          |                    |
| Seal behaviour: against itself @ 140°C, 1s, 2 bar T - peel |    | N/cm                     | Peel Strength<br>5 |
| Suggested parameters of use                                |    |                          |                    |
| Seal Range - Temperature                                   |    | °C                       | 120-200            |
| Seal Range - Dwell Time                                    |    | s                        | 0.5-2.0            |
| Seal Range - Seal pressure                                 |    | bar                      | 2.0-5.0            |
| Thermoforming Temperature                                  |    | °C                       | 90                 |

#### 4. SHELF LIFE

5 years (stability duration after sterilization)

#### 5. STORAGE CONDITIONS

Recommended storage conditions: Store between 5 - 25°C, away from moisture and direct heat.

Do not use after expiry date!

Protect from humidity.

#### **6. STERILIZATION METHOD**

**ALCALACTINE®** sutures are sterilized by Ethylene Oxide. Sterility is controlled via bio-indicators after each sterilization process.

Do not re-sterilize!

Do not use if package is opened or damaged!

Discard opened unused sutures.

**PRODUCT: ALCALACTINE® RAPID (POLY[GLYCOLIC ACID(90%)- CO-LACTIC ACID(10%)] RAPID)  
SURGICAL SUTURE WITH OR WITHOUT NEEDLE**

## 1. INTRODUCTION

**ALCALACTINE® RAPID** suture is a synthetic absorbable, braided, coated suture composed of a copolymer made from 90% glycolide and 10% L-lactide and is available undyed. The undyed suture is beige in colour.

**ALCALACTINE® RAPID** suture is available in sterile form wound over spool, covered with aluminium pouch.

**ALCALACTINE® RAPID** suture meets all the requirements established by the United States Pharmacopoeia (USP) and the European Pharmacopoeia (EP) for Synthetic Absorbable Surgical Sutures except for diameters which are slightly oversized in some sizes.

## 2. CHEMICAL COMPOSITION

### 2.1. SURGICAL SUTURE

|                                       |                                       |
|---------------------------------------|---------------------------------------|
| Name                                  | : Poly (glycolide- co lactide)(90/10) |
| Formula of Poly(glycolide-co lactide) | : $(C_2H_2O_2)_m(C_3H_4O_2)_n$        |
| Content of residues                   | : Monomer (Glycolide) $\leq 2$ wt. %  |
|                                       | : Catalyst (Tin) $\leq 50$ ppm        |
|                                       | : Heavy metal $\leq 10$ ppm           |
|                                       | : Residual solvents $\leq 500$ ppm    |
|                                       | : Stabilizing agents none             |
|                                       | : Antioxidizing agents none           |

### COATING MATERIAL

|                             |                                                         |
|-----------------------------|---------------------------------------------------------|
| Name                        | : Poly(glycolide-co-lactide) (30/70) + Calcium Stearate |
| Formula                     | : $(C_2H_2O_2)_m(C_3H_4O_2)_n + C_{36}H_{70}O_4Ca$      |
| Content of coating material | : 1~7wt% (depending on suture size)                     |

## 2.2. SURGICAL NEEDLE

### 2.2.1. Specification for SS Wire Grade 'AISI 302'

#### Chemical Composition

| C<br>(max%) | Mn<br>(max%) | P<br>(max%) | S<br>(max%) | Si<br>(max%) | Cr<br>(%) | Ni<br>(%) | N<br>(max%) | Fe<br>(%) |
|-------------|--------------|-------------|-------------|--------------|-----------|-----------|-------------|-----------|
| 0,12        | 2            | 0,045       | 0,03        | 1            | 17-19     | 8-10      | 0,10        | Balance   |

### 2.2.2. Specification for SS Wire Grade AISI 420

#### Chemical Composition

| C (max %)  | Mn (max %) | P (max %) | S (max %) | Si (max %) | Cr (min %) |
|------------|------------|-----------|-----------|------------|------------|
| 0,29       | 1          | 0,040     | 0,03      | 1          | 12,5       |
| Ni (max %) |            | Fe        |           |            |            |
| 0,6        |            | Balance   |           |            |            |

### 3. PACKAGING INFORMATION (ALUMINIUM POUCH) (TOP)

| Properties                                                 |    | Unit                     | Value              |
|------------------------------------------------------------|----|--------------------------|--------------------|
| Composition                                                |    |                          |                    |
| Lacquer                                                    |    | g/m <sup>2</sup>         | 3                  |
| PET 12 Microns                                             |    | g/m <sup>2</sup>         | 17                 |
| Color band & White Ink                                     |    | g/m <sup>2</sup>         | 3                  |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| PET 12 Microns                                             |    | g/m <sup>2</sup>         | 17                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| Aluminium 30 Microns                                       |    | g/m <sup>2</sup>         | 82                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 3                  |
| White Peel 30 Microns                                      |    | g/m <sup>2</sup>         | 27                 |
| Total Weight                                               |    | g/m <sup>2</sup>         | 158                |
| Yield                                                      |    | m <sup>2</sup> /Kg       | 6.32               |
| Mechanical Properties                                      |    |                          |                    |
| Tensile Strength                                           | MD | N/cm                     | >30                |
|                                                            | CD | N/cm                     | >30                |
| Elongation                                                 | MD | %                        | 10                 |
|                                                            | CD | %                        | 10                 |
| Tear Resistance                                            | MD | mN                       | 150                |
|                                                            | CD | mN                       | 200                |
| Puncture Resistance ASTM                                   |    | N/8mm <sup>2</sup>       | 60                 |
| Barrier Properties                                         |    |                          |                    |
| Water Vapour Transmission Rate (WVTR @ 38°C & 90%RH)       |    | g/m <sup>2</sup> .d      | <0.1*              |
| Oxygen Transmission Rate (OTR @ 23°C & 60%RH)              |    | ml/m <sup>2</sup> .d.atm | <0.1*              |
| Seal Properties                                            |    |                          |                    |
| Seal behaviour: against itself @ 140°C, 1s, 2 bar T - peel |    | N/cm                     | Peel Strength<br>5 |
| Suggested parameters of use                                |    |                          |                    |
| Seal Range - Temperature                                   |    | °C                       | 120-200            |
| Seal Range - Dwell Time                                    |    | s                        | 0.5-2.0            |
| Seal Range - Seal pressure                                 |    | bar                      | 2.0-5.0            |
| Thermoforming Temperature                                  |    | °C                       | n.a                |

(BOTTOM)

| Properties                                                 |    | Unit                     | Value              |
|------------------------------------------------------------|----|--------------------------|--------------------|
| Composition                                                |    |                          |                    |
| OPA 25 Microns                                             |    | g/m <sup>2</sup>         | 34                 |
| ADH                                                        |    | g/m <sup>2</sup>         | 5                  |
| Aluminium 45 Microns                                       |    | g/m <sup>2</sup>         | 124                |
| ADH                                                        |    | g/m <sup>2</sup>         | 5                  |
| White Peel 30 Microns                                      |    | g/m <sup>2</sup>         | 27                 |
| Total Weight                                               |    | g/m <sup>2</sup>         | 198                |
| Yield                                                      |    | m <sup>2</sup> /Kg       | 5.05               |
| Mechanical Properties                                      |    |                          |                    |
| Tensile Strength                                           | MD | N/cm                     | >30                |
|                                                            | CD | N/cm                     | >35                |
| Elongation                                                 | MD | %                        | 70                 |
|                                                            | CD | %                        | 80                 |
| Tear Resistance                                            | MD | mN                       | 800                |
|                                                            | CD | mN                       | 800                |
| Puncture Resistance ASTM                                   |    | N/8mm <sup>2</sup>       | 60                 |
| Barrier Properties                                         |    |                          |                    |
| Water Vapour Transmission Rate (WVTR @ 38°C & 90%RH)       |    | g/m <sup>2</sup> .d      | <0.1*              |
| Oxygen Transmission Rate (OTR @ 23°C & 60%RH)              |    | ml/m <sup>2</sup> .d.atm | <0.1*              |
| Seal Properties                                            |    |                          |                    |
| Seal behaviour: against itself @ 140°C, 1s, 2 bar T - peel |    | N/cm                     | Peel Strength<br>5 |
| Suggested parameters of use                                |    |                          |                    |
| Seal Range - Temperature                                   |    | °C                       | 120-200            |
| Seal Range - Dwell Time                                    |    | s                        | 0.5-2.0            |
| Seal Range - Seal pressure                                 |    | bar                      | 2.0-5.0            |
| Thermoforming Temperature                                  |    | °C                       | 90                 |

#### 4. SHELF LIFE

5 years (stability duration after sterilization)

#### 5. STORAGE CONDITIONS

Recommended storage conditions: Store between 5 - 25°C, away from moisture and direct heat.

Do not use after expiry date!

Protect from humidity.

#### 6. STERILIZATION METHOD

**ALCALACTINE® RAPID** sutures are sterilized by Gamma irradiation.

Do not re-sterilize!

Do not use if package is opened or damaged!

Discard opened unused sutures.

**PRODUCT: ALCALENE® (POLYPROPYLENE) SURGICAL SUTURE WITH OR WITHOUT NEEDLE****1. INTRODUCTION**

**ALCALENE®** is a synthetic non-absorbable monofilament suture composed of polypropylene and is available dyed. Only FDA-approved colour additives such as phthalocyanine blue are used.

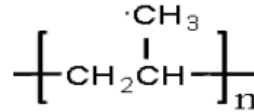
**ALCALENE®** suture is available in sterile form wound over spool, covered with sterilization pouch.

**ALCALENE®** meets all the requirements of the European Pharmacopoeia (EP) for Synthetic non-absorbable monofilament Sutures.

**2. CHEMICAL COMPOSITION****2.1. SURGICAL SUTURE**

Name : Polypropylene

Formula :



Identiy : IR

**DYESTUFF**

Name : Phthalocyanine Blue

Chemical Name : Cu- phthalocyanine beta

Formula : C<sub>32</sub>H<sub>16</sub>CuN<sub>8</sub>

C.I. Number : P.B. 15:3 / 74160

Reference : 21 CFR 74, 3045

Dyeing process : Dyeing in polymer

Content of dyestuff : < 0.5wt%

## 2.2. SURGICAL NEEDLE

### 2.2.1. Specification for SS Wire Grade 'AISI 302'

#### Chemical Composition

| C<br>(max%) | Mn<br>(max%) | P<br>(max%) | S<br>(max%) | Si<br>(max%) | Cr<br>(%) | Ni<br>(%) | N<br>(max%) | Fe<br>(%) |
|-------------|--------------|-------------|-------------|--------------|-----------|-----------|-------------|-----------|
| 0,12        | 2            | 0,045       | 0,03        | 1            | 17-19     | 8-10      | 0,10        | Balance   |

### 2.2.2. Specification for SS Wire Grade AISI 420

#### Chemical Composition

| C (max %)  | Mn (max %) | P (max %) | S (max %) | Si (max %) | Cr (min %) |
|------------|------------|-----------|-----------|------------|------------|
| 0,29       | 1          | 0,040     | 0,03      | 1          | 12,5       |
| Ni (max %) |            | Fe        |           |            |            |
| 0,6        |            | Balance   |           |            |            |

### 3. PACKAGING INFORMATION

| TYVEK 2FS | PROPERTIES                                          | UNIT                | TYPICAL VALUE |
|-----------|-----------------------------------------------------|---------------------|---------------|
|           | DELAMINATION                                        | N/2.54 cm           | 2,7           |
|           | BASIC WEIGHT                                        | g/m <sup>2</sup>    | 60            |
|           | POROSITY                                            | sec                 | 22            |
|           | OPACITY                                             | %                   | 94            |
|           | THICKNESS                                           | mils                | 155           |
|           | SPENCER PUNCTURE                                    | J/m                 | 5254          |
|           | MULLEN BURST                                        | kPa                 | 925           |
|           | HYDROSTATIC HEAD                                    | cm H <sub>2</sub> O | 145           |
|           | ELMENDORF TEAR, XD                                  | mN                  | 3694          |
|           | ELMENDORF TEAR, MD                                  | mN                  | 2803          |
|           | TENSILE STRENGTH,XD                                 | N/2.54 cm           | 157           |
|           | TENSILE STRENGTH,MD                                 | N/2.54 cm           | 156           |
|           | FREE FROM LEAD AND HEAVY METALS AND TOXIC MATERIALS |                     |               |

| LAMINATED FILM                                      | PROPERTIES   | UNIT                  | STANDARD OR TEST METHOD | TYPICAL VALUE |        |
|-----------------------------------------------------|--------------|-----------------------|-------------------------|---------------|--------|
|                                                     | THICKNESS    | Micron                | ASTM D 374              | LAM.FILM      | 55 ± 5 |
|                                                     |              |                       |                         | PE            | 40 ± 5 |
|                                                     |              |                       |                         | PET           | 12 ± 2 |
|                                                     | COF          | F/M                   | ASTM F 1894             | 0,30-0,35     |        |
|                                                     |              | M/M                   |                         | 0,35-0,40     |        |
|                                                     | THERMAL SEAL | °C                    | ASTM F 88               | 110 ± 5       |        |
|                                                     | TEAR         | G            MD<br>TD | D1922                   | 50 ± 5        |        |
|                                                     |              |                       |                         | 60 ± 5        |        |
|                                                     | GLOSS        | %                     | ASTMD 2457              | 60 ± 5        |        |
| FREE FROM LEAD AND HEAVY METALS AND TOXIC MATERIALS |              |                       |                         |               |        |

### PRODUCT SPECIFICATIONS

| REEL | PROPERTIES            | UNIT                      | STANDARD OR TEST METHOD | TYPICAL VALUE                   |            |
|------|-----------------------|---------------------------|-------------------------|---------------------------------|------------|
|      | SEAL STRENGTH         | cm                        | ASTM F 88               | < 25                            | ≥ 25       |
|      |                       | Edge Seal (gr /15 mm) (N) |                         | 3,0 ± 0,5                       | 4,0 ± 0,75 |
|      | BUBBLE TEST           |                           | ASTM F2096-04           | None                            |            |
|      | PINHOLE DETERMINATION |                           | EN 868-5 Annex C        | None                            |            |
|      | DIMENSION CONTROL     | cm or mm                  | ASTM F2203-02           | Desired dimensions              |            |
|      | LEAKAGE TEST          |                           | ASTM F1929-98           | None                            |            |
|      | PEEL DIRECTION        |                           | EN 868-5 Annex E        | Must not break the particle     |            |
|      | INDICATOR CONTROL     |                           | ISO 11140-1             | Must return the specified color |            |

| INDICATOR | STERILIZATION METHOD | BEFORE STERILIZATION | AFTER STERILIZATION |
|-----------|----------------------|----------------------|---------------------|
|           | VH2O2                | Red/Pink             | Yellow              |

**4. SHELF LIFE**

5 years (stability duration after sterilization)

**5. STORAGE CONDITIONS**

Recommended storage conditions: Store between 5 - 25°C, away from moisture and direct heat.

Do not use after expiry date!

Protect from humidity.

**6. STERILIZATION METHOD**

ALCALENE® sutures are sterilized by Ethylene Oxide. Sterility is controlled via bio-indicators after each sterilization process.

Do not re-sterilize!

Do not use if package is opened or damaged!

Discard opened unused sutures.



**KATSAN**  
MEDICAL DEVICES

Experience in Surgical Sutures since 1976

[www.katsanas.com](http://www.katsanas.com)

**DETAILED**  
PRODUCT CATALOGUE





Katsan Surgical Sutures, a leading synthetic surgical suture manufacturing company in Turkey, was founded in 1976 as a catgut producer. Katsan is striving for higher quality products and a bigger market share by using innovative technologies.

Katsan has a broad range of products that are being used in both human health and veterinary practices. Our portfolio includes synthetic surgical sutures, hemostats and mesh. We conduct researches in our R&D department in order to improve quality and efficiency of marketed products and new projects.

The Company's distribution network consists of North America, Europe, Middle East, Asia, Africa and Oceania region.

With our fully CE marked and ISO 13485 quality certificated product array that are produced in our T.R. Ministry of Health approved facilities, we produce world-class sterile surgical medical devices for a variety of surgical operations.

Our company success depends on high-performing and professional employees who are experts in their own fields and the creative solutions that we give to our customers.

At Katsan, we are responsible to improve quality of lives of the patients, meet the demands of customers and surgeons and we achieve these through ethical practice and by being respectful to our environment.

# KATSAN SURGICAL NEEDLE

## ULTRA SHARP NEEDLE POINT

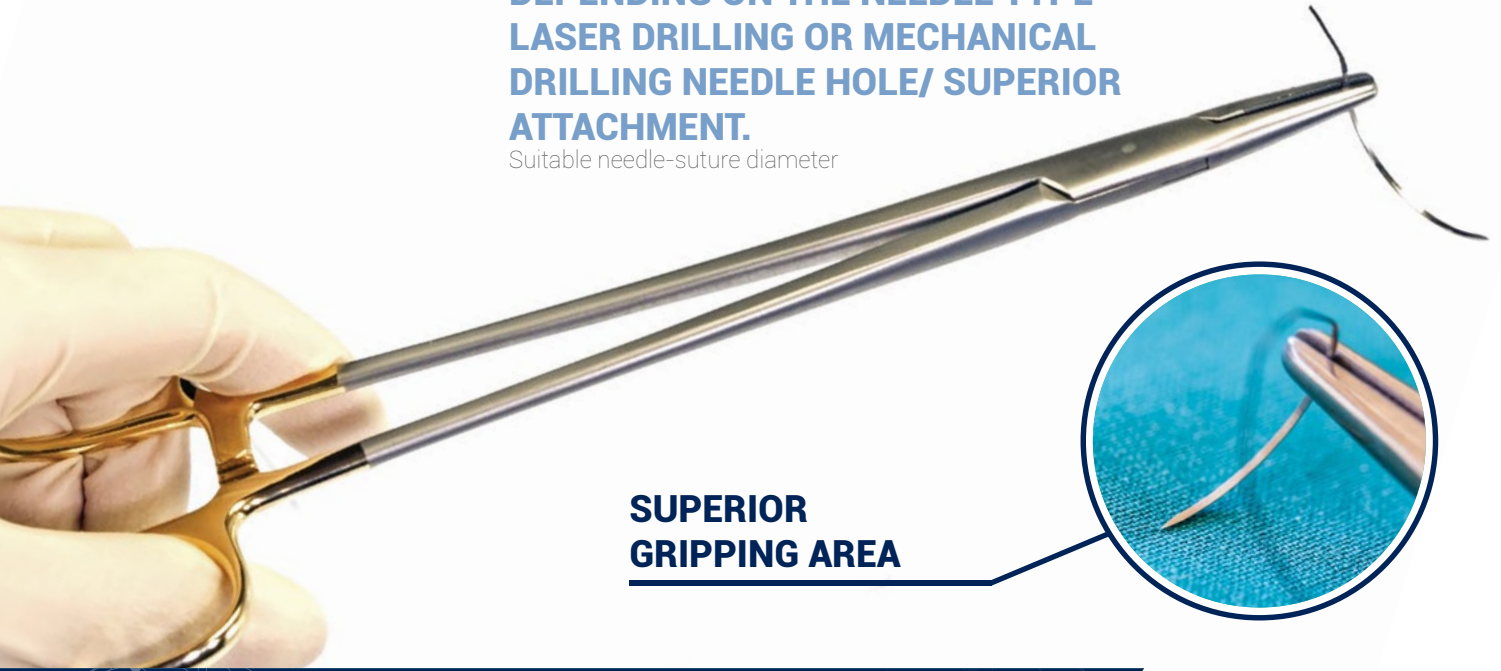
Atraumatic tissue penetration

## SILICON COATED STAINLESS STEEL NEEDLE

Maximum strength and smooth surface

## DEPENDING ON THE NEEDLE TYPE LASER DRILLING OR MECHANICAL DRILLING NEEDLE HOLE/ SUPERIOR ATTACHMENT.

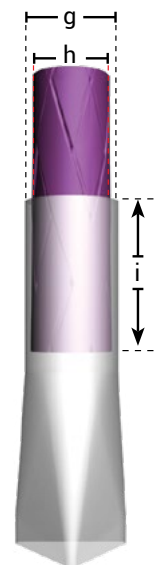
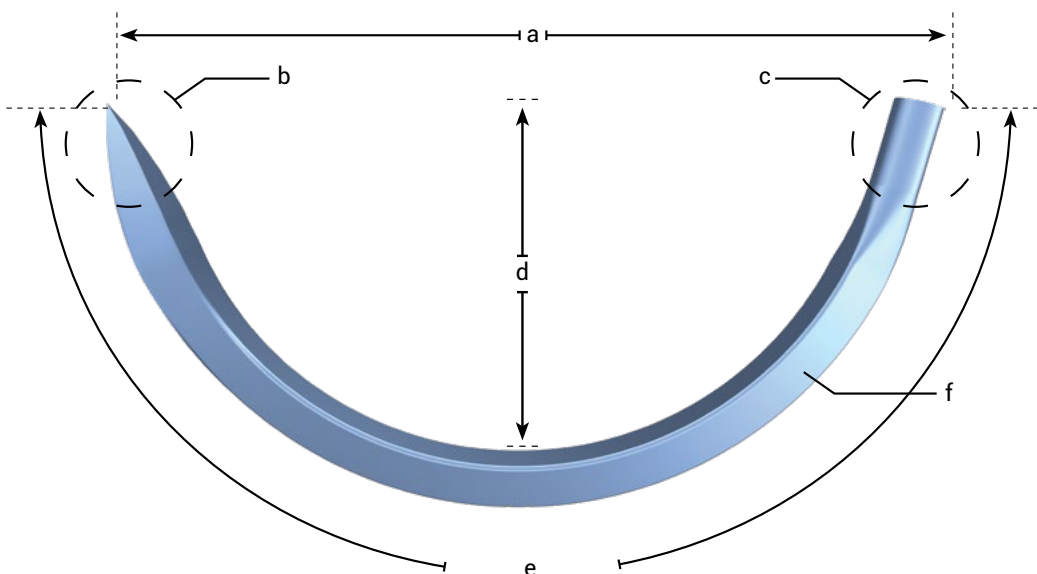
Suitable needle-suture diameter



## SUPERIOR GRIPPING AREA

# 1

## ATRAUMATIC NEEDLE ANATOMY



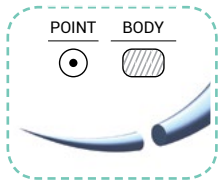
**a** : Needle chord length  
**b** : Needle point  
**c** : Swage

**d** : Needle radius  
**e** : Needle length  
**f** : Needle body

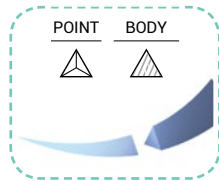
**g** : Needle diameter  
**h** : Suture diameter  
**i** : Depth of needle hole

# 2

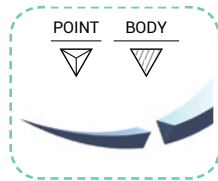
## ATRAUMATIC NEEDLE TYPES



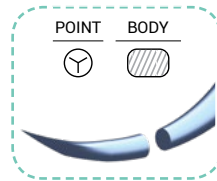
TAPER POINT



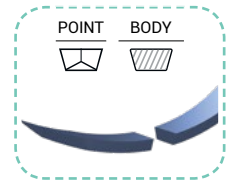
CUTTING EDGE



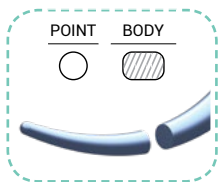
REVERSE CUTTING EDGE



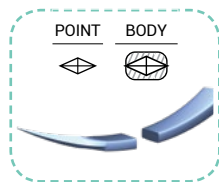
TAPER CUT



SPATULA



BLUNT POINT

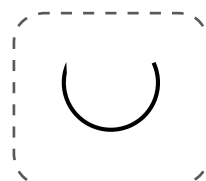
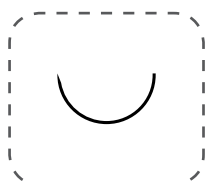
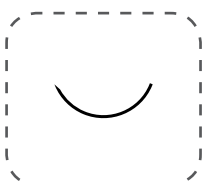
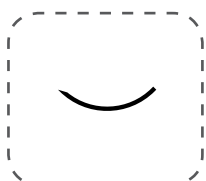
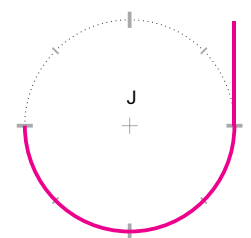
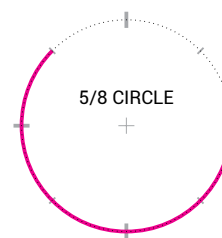
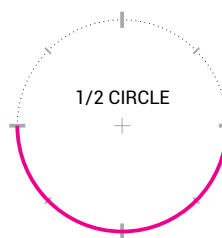
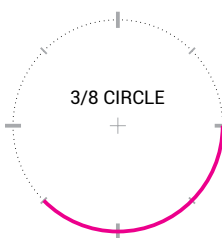
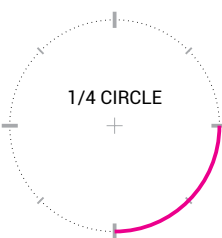
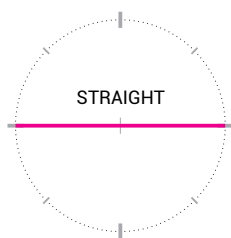


DIAMOND

# 3

## ATRAUMATIC NEEDLE MODELS

### NEEDLE FORMS



# 4

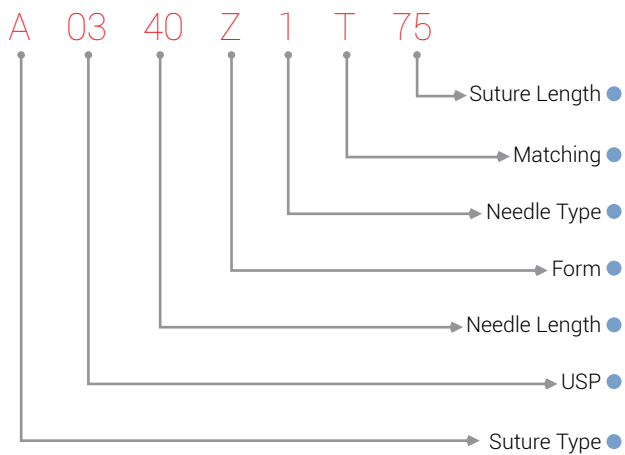
## PRODUCT CODING SCHEME

| CODE | SUTURE TYPE        | CODE | USP     | METRIC     | CODE | FORM     | CODE | NEEDLE TYPE          | CODE | MATCHING |
|------|--------------------|------|---------|------------|------|----------|------|----------------------|------|----------|
| A    | ALCASORB®          | 01   | USP 2   | Metric 5   | Z    | 1/2      | 1    | TAPER POINT          | T    | SINGLE   |
| B    | ALCASORB® RAPID    | 02   | USP 1   | Metric 4   | V    | 3/8      | 2    | BLUNT POINT          | F    | DOUBLE   |
| C    | ALCALACTINE®       | 03   | USP 0   | Metric 3,5 | U    | 5/8      | 3    | CUTTING EDGE         | P    | LOOP     |
| D    | ALCALACTINE® RAPID | 04   | USP 2/0 | Metric 3   | R    | 1/4      | 4    | REVERSE CUTTING EDGE |      |          |
| E    | ALCASILK®          | 05   | USP 3/0 | Metric 2   | J    | J        | 5    | TAPER CUT            |      |          |
| F    | ALCALENE®          | 06   | USP 4/0 | Metric 1,5 | S    | STRAIGHT | 6    | DIAMOND              |      |          |
| G    | ALCALACTONE®       | 07   | USP 5/0 | Metric 1   |      |          | 7    | SPATULA              |      |          |
| H    | ALCADINONE®        | 08   | USP 6/0 | Metric 0,7 |      |          |      |                      |      |          |
| K    | ALCAMIDE®          |      |         |            |      |          |      |                      |      |          |

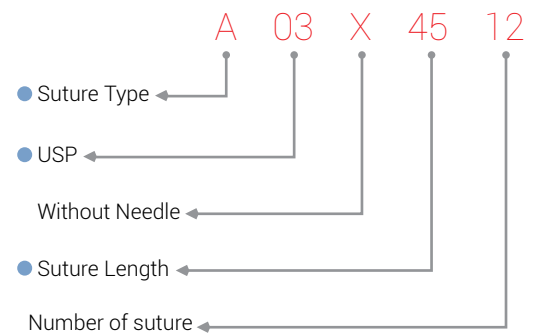
INDICATING LENGTH OF THE NEEDLE

INDICATING LENGTH OF THE SUTURE

### PRODUCT CODING OF SUTURES WITH NEEDLE



### PRODUCT CODING OF SUTURES WITHOUT NEEDLE





**ALCASORB®**  
High knot safety

## PGA - Polyglycolic Acid

ALCASORB® sutures are synthetic absorbable sterile surgical sutures which are made of Polyglycolic Acid. The braided structure of the suture is coated. Coating material of coated suture is prepared by Calcium Stearate and Polycaprolactone structure.

In order to ease of operation ALCASORB® sutures are colored violet. ALCASORB® sutures has been presented in USP 6/0 – USP 3 gauge sizes in a variety of lengths from 10 cm to 150cm, as non-needed or attached to stainless steel needles of varying types and sizes.

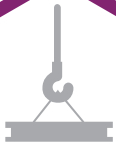
ALCASORB®

|                                                                                   |                                                                            |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|
|  | Absorbable, multifilament, coated, violet                                  |
| <b>CHEMICAL STRUCTURE</b>                                                         | 100% Polyglycolic Acid, synthetic, absorbable, braided surgical suture     |
| <b>COATING</b>                                                                    | Polycaprolactone and Calcium Stearate                                      |
| <b>WOUND SUPPORT</b>                                                              | ~ 30 days                                                                  |
| <b>ABSORPTION</b>                                                                 | ~ 60-90 days                                                               |
| <b>TENSILE STRENGTH</b>                                                           | 2 <sup>nd</sup> week ~ 70%<br>3 <sup>rd</sup> week ~ 40%-50% wound support |
| <b>USP RANGE</b>                                                                  | 6/0 - 3                                                                    |
| <b>STERILIZATION</b>                                                              | EO (Ethylene Oxide)                                                        |
| <b>PACKAGING</b>                                                                  | In aluminum foil packages with needle or without needle                    |



## HIGH TENSILE STRENGTH

Excellent wound support



## BRAIDED STRUCTURE

Minimum suture memory  
High usage characteristic  
Flexibility  
Excellent tensile strength  
Excellent knot safety



## ABSORPTION BY PROGRESSIVE HYDROLYSIS

Predictable absorption rate



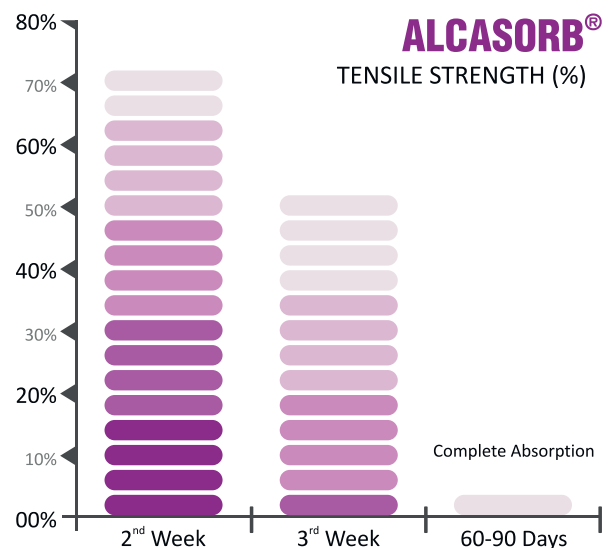
## COATED MULTIFILAMENT

Minimum tissue trauma  
Minimum capillarity  
Ease of knot tying and adjustability



## AREAS OF USAGE

- General Surgery
- Gynecology
- Orthopedic Surgery
- Urology
- Gastrointestinal Surgery
- Ligation
- Oral Surgery
- Veterinary
- Plastic Surgery
- Wound Closure at Pediatric Surgery
- Skin Closure





## 1/4 CIRCLE SPATULA

| NEEDLE TYPE                                                                                     | SUTURE LENGTH | COLOR  | USP        |
|-------------------------------------------------------------------------------------------------|---------------|--------|------------|
|                                                                                                 |               |        | 6/0        |
| <br>8mm Double | 45cm          | violet | A0808R7F45 |

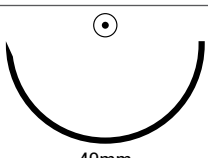
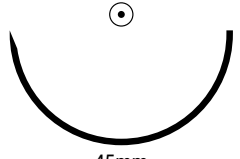
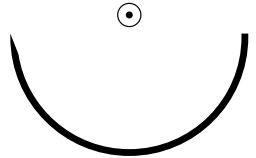
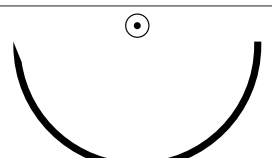
## 1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH        | COLOR  | USP        |            |                          |                          |                                        |            |
|---------------------------------------------------------------------------------------------|----------------------|--------|------------|------------|--------------------------|--------------------------|----------------------------------------|------------|
|                                                                                             |                      |        | 6/0        | 5/0        | 4/0                      | 3/0                      | 2/0                                    | 0          |
| <br>13mm   | 45cm<br>60cm<br>75cm | violet | A0813Z1T60 | A0713Z1T60 | A0613Z1T60<br>A0613Z1T75 |                          |                                        |            |
| <br>16mm   | 75cm                 | violet |            | A0716Z1T75 | A0616Z1T75               | A0516Z1T75               |                                        |            |
| <br>17mm   | 75cm                 | violet |            | A0717Z1T75 | A0617Z1T75               |                          |                                        |            |
| <br>20mm | 75cm                 | violet |            |            | A0620Z1T75               | A0520Z1T75               |                                        |            |
| <br>26mm | 70cm<br>75cm<br>90cm | violet |            |            | A0626Z1T75<br>A0626Z1T90 | A0526Z1T75<br>A0526Z1T90 | A0426Z1T70<br>A0426Z1T75<br>A0426Z1T90 | A0326Z1T90 |

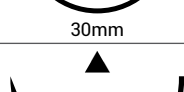
## 1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH        | COLOR  | USP        |                                        |                          |                          |
|---------------------------------------------------------------------------------------------|----------------------|--------|------------|----------------------------------------|--------------------------|--------------------------|
|                                                                                             |                      |        | 3/0        | 2/0                                    | 0                        | 1                        |
| <br>30mm | 70cm<br>75cm<br>90cm | violet | A0530Z1T75 | A0430Z1T70<br>A0430Z1T75<br>A0430Z1T90 | A0330Z1T75<br>A0330Z1T90 | A0230Z1T75<br>A0230Z1T90 |
| <br>35mm | 75cm                 | violet |            | A0435Z1T75                             | A0335Z1T75               | A0235Z1T75               |
| <br>37mm | 75cm<br>90cm         | violet |            | A0437Z1T90                             | A0337Z1T75               |                          |

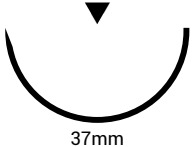
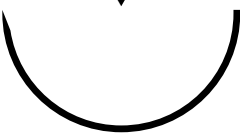
## 1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                               | SUTURE LENGTH | COLOR  | USP        |                          |                          |                          |
|-------------------------------------------------------------------------------------------|---------------|--------|------------|--------------------------|--------------------------|--------------------------|
|                                                                                           |               |        | 2/0        | 0                        | 1                        | 2                        |
| <br>40mm | 75cm<br>90cm  | violet | A0440Z1T75 | A0340Z1T75<br>A0340Z1T90 | A0240Z1T75<br>A0240Z1T90 | A0140Z1T75<br>A0140Z1T90 |
| <br>45mm | 75cm<br>90cm  | violet |            |                          | A0245Z1T75               | A0145Z1T75<br>A0145Z1T90 |
| <br>48mm | 75cm<br>90cm  | violet |            |                          |                          | A0148Z1T90               |
| <br>50mm  | 75cm<br>90cm  | violet |            |                          | A0250Z1T90               | A0150Z1T75<br>A0150Z1T90 |

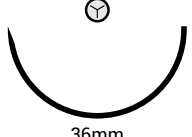
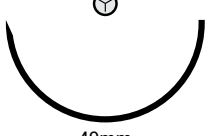
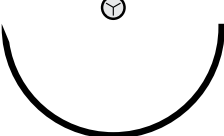
## 1/2 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP        |            |            |                          |                          |                          |                          |
|---------------------------------------------------------------------------------------------|---------------|--------|------------|------------|------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                             |               |        | 5/0        | 4/0        | 3/0        | 2/0                      | 0                        | 1                        | 2                        |
| <br>20mm | 75cm          | violet | A0720Z3T75 | A0620Z3T75 |            |                          |                          |                          |                          |
| <br>26mm | 75cm<br>90cm  | violet |            |            | A0526Z3T75 | A0426Z3T75<br>A0426Z3T90 | A0326Z3T75<br>A0326Z3T90 |                          |                          |
| <br>30mm | 75cm<br>90cm  | violet |            |            |            | A0430Z3T75<br>A0430Z3T90 | A0330Z3T75<br>A0330Z3T90 |                          |                          |
| <br>35mm | 75cm          | violet |            |            |            |                          | A0335Z3T75               | A0235Z3T75               |                          |
| <br>40mm | 75cm<br>90cm  | violet |            |            |            |                          |                          | A0240Z3T75<br>A0240Z3T90 | A0140Z3T75<br>A0140Z3T90 |

## 1/2 CIRCLE REVERSE CUTTING EDGE

| NEEDLE TYPE                                                                               | SUTURE LENGTH | COLOR  | USP        |            |                          |                          |                          |
|-------------------------------------------------------------------------------------------|---------------|--------|------------|------------|--------------------------|--------------------------|--------------------------|
|                                                                                           |               |        | 4/0        | 2/0        | 0                        | 1                        | 2                        |
| <br>20mm | 75cm          | violet | A0620Z4T75 |            |                          |                          |                          |
| <br>30mm | 75cm          | violet |            | A0430Z4T75 | A0330Z4T75               |                          |                          |
| <br>37mm | 75cm<br>90cm  | violet |            | A0437Z4T75 | A0337Z4T75<br>A0337Z4T90 | A0237Z4T75<br>A0237Z4T90 |                          |
| <br>48mm | 75cm<br>90cm  | violet |            |            | A0348Z4T75<br>A0348Z4T90 | A0248Z4T75<br>A0248Z4T90 | A0148Z4T75<br>A0148Z4T90 |

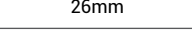
## 1/2 CIRCLE TAPER CUT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP                      |                          |                          |                          |            |
|---------------------------------------------------------------------------------------------|---------------|--------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
|                                                                                             |               |        | 3/0                      | 2/0                      | 0                        | 1                        | 2          |
| <br>36mm | 75cm<br>90cm  | violet | A0536Z5T75<br>A0536Z5T90 | A0436Z5T75<br>A0436Z5T90 | A0336Z5T75<br>A0336Z5T90 | A0236Z5T75               |            |
| <br>40mm | 75cm<br>90cm  | violet |                          | A0440Z5T75               | A0340Z5T75<br>A0340Z5T90 | A0240Z5T75<br>A0240Z5T90 |            |
| <br>45mm | 75cm<br>90cm  | violet |                          |                          | A0345Z5T75<br>A0345Z5T90 | A0245Z5T75<br>A0245Z5T90 | A0145Z5T90 |

## 3/8 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP                      |            |                          |                          |
|---------------------------------------------------------------------------------------------|---------------|--------|--------------------------|------------|--------------------------|--------------------------|
|                                                                                             |               |        | 6/0                      | 5/0        | 3/0                      | 2/0                      |
| <br>13mm | 60cm<br>75cm  | violet | A0813V1T60<br>A0813V1T75 | A0713V1T60 |                          |                          |
| <br>16mm | 75cm          | violet | A0816V1T75               | A0716V1T75 |                          |                          |
| <br>26mm | 75cm<br>90cm  | violet |                          |            | A0526V1T75<br>A0526V1T90 | A0426V1T75<br>A0426V1T90 |

### 3/8 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                                       | SUTURE LENGTH | COLOR  | USP        |                          |            |                          |                          |                          |
|---------------------------------------------------------------------------------------------------|---------------|--------|------------|--------------------------|------------|--------------------------|--------------------------|--------------------------|
|                                                                                                   |               |        | 6/0        | 5/0                      | 4/0        | 3/0                      | 2/0                      | 0                        |
| <br>10mm         | 45cm          | violet | A0810V3T45 |                          |            |                          |                          |                          |
| <br>10 mm Double | 60cm          | violet | A0810V3F60 |                          |            |                          |                          |                          |
| <br>16mm         | 45cm<br>75cm  | violet |            | A0716V3T45<br>A0716V3T75 |            |                          |                          |                          |
| <br>20mm         | 75cm          | violet |            |                          | A0620V3T75 | A0520V3T75               |                          |                          |
| <br>24mm         | 75cm          | violet |            |                          |            | A0524V3T75               |                          |                          |
| <br>26mm         | 75cm<br>90cm  | violet |            |                          | A0626V3T75 | A0526V3T75<br>A0526V3T90 | A0426V3T75<br>A0426V3T90 |                          |
| <br>30mm         | 75cm<br>90cm  | violet |            |                          |            | A0530V3T75               | A0430V3T75<br>A0430V3T90 | A0330V3T75<br>A0330V3T90 |
| <br>35mm       | 75cm<br>90cm  | violet |            |                          |            | A0535V3T75               | A0435V3T75<br>A0435V3T90 |                          |

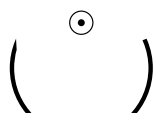
### 3/8 CIRCLE REVERSE CUTTING EDGE

| NEEDLE TYPE                                                                                        | SUTURE LENGTH | COLOR  | USP                      |                          |            |            |            |
|----------------------------------------------------------------------------------------------------|---------------|--------|--------------------------|--------------------------|------------|------------|------------|
|                                                                                                    |               |        | 6/0                      | 5/0                      | 4/0        | 3/0        | 2/0        |
| <br>13mm        | 45cm          | violet | A0813V4T45               | A0713V4T45               |            |            |            |
| <br>13mm Double | 45cm<br>60cm  | violet | A0813V4F45<br>A0813V4F60 | A0713V4F45<br>A0713V4F60 |            |            |            |
| <br>18mm        | 75cm          | violet |                          |                          | A0618V4T75 | A0518V4T75 |            |
| <br>24mm        | 75cm          | violet |                          |                          | A0624V4T75 | A0524V4T75 | A0424V4T75 |

### 3/8 CIRCLE REVERSE CUTTING EDGE

| NEEDLE<br>TYPE                                                                            | SUTURE<br>LENGTH | COLOR  | USP                      |                          |                          |            |                          |
|-------------------------------------------------------------------------------------------|------------------|--------|--------------------------|--------------------------|--------------------------|------------|--------------------------|
|                                                                                           |                  |        | 3/0                      | 2/0                      | 0                        | 1          | 2                        |
| <br>26mm | 75cm<br>90cm     | violet | A0526V4T75<br>A0526V4T90 | A0426V4T75<br>A0426V4T90 |                          |            |                          |
| <br>36mm | 75cm<br>90cm     | violet |                          | A0436V4T75<br>A0436V4T90 | A0336V4T75<br>A0336V4T90 |            |                          |
| <br>48mm  | 75cm<br>90cm     | violet |                          |                          |                          | A0248V4T75 | A0148V4T75<br>A0148V4T90 |

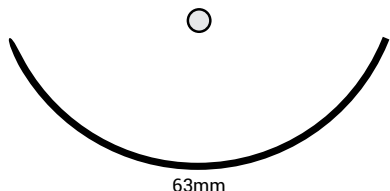
### 5/8 CIRCLE TAPER POINT

| NEEDLE<br>TYPE                                                                             | SUTURE<br>LENGTH | COLOR  | USP        |                          |                          |
|--------------------------------------------------------------------------------------------|------------------|--------|------------|--------------------------|--------------------------|
|                                                                                            |                  |        | 3/0        | 2/0                      | 0                        |
| <br>26mm  | 75cm<br>90cm     | violet | A0526U1T75 | A0426U1T75<br>A0426U1T90 |                          |
| <br>36mm | 75cm<br>90cm     | violet |            | A0436U1T75<br>A0436U1T90 | A0336U1T75<br>A0336U1T90 |

## STRAIGHT CUTTING

| NEEDLE<br>TYPE                                                                    | SUTURE<br>LENGTH | COLOR  | USP        |            |            |
|-----------------------------------------------------------------------------------|------------------|--------|------------|------------|------------|
|                                                                                   |                  |        | 4/0        | 3/0        | 2/0        |
|  | 75cm             | violet | A0660S3T75 | A0560S3T75 | A0460S3T75 |
|                                                                                   | 90cm             |        | A0660S3T90 | A0560S3T90 | A0460S3T90 |

## 3/8 CIRCLE BLUNT POINT

| NEEDLE<br>TYPE                                                                   | SUTURE<br>LENGTH | COLOR  | USP        |            |            |
|----------------------------------------------------------------------------------|------------------|--------|------------|------------|------------|
|                                                                                  |                  |        | 0          | 1          | 2          |
|  | 75cm             | violet | A0363V2T75 | A0263V2T75 | A0163V2T75 |
|                                                                                  | 90cm             |        |            | A0263V2T90 | A0163V2T90 |

## SUTURES WITHOUT NEEDLE

| USP | 150cm    | 250cm    | 75cm    | 70cm    | 2x70cm   | 5x70cm   | 6x45cm   | 12x45cm  | 10x50cm  | 17x45cm  |
|-----|----------|----------|---------|---------|----------|----------|----------|----------|----------|----------|
| 5/0 | A07x1501 | A07X2501 |         |         | A07X7002 | A07X7005 | A07X4506 | A07X4512 | A07X5010 | A07X4517 |
| 4/0 | A06X1501 | A06X2501 |         |         | A06X7002 | A06X7005 | A06X4506 | A06X4512 | A06X5010 | A06X4517 |
| 3/0 | A05X1501 | A05X2501 | A05X751 |         | A05X7002 | A05X7005 | A05X4506 | A05X4512 | A05X5010 | A05X4517 |
| 2/0 | A04X1501 | A04X2501 | A04X751 |         | A04X7002 | A04X7005 | A04X4506 | A04X4512 |          |          |
| 0   | A03X1501 | A03X2501 |         | A03X701 | A03X7002 | A03X7005 | A03X4506 |          |          |          |
| 1   | A02X1501 | A02X2501 |         |         | A02X7002 | A02X7005 | A02X4506 |          |          |          |



# ALCASORB® RAPID

Rapid absorption,  
minimum inflammation

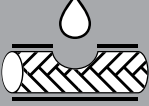


## PGAR - Polyglycolic Acid Rapid

ALCASORB® RAPID sutures are synthetic absorbable sterile surgical sutures which are made of Polyglycolic Acid. The braided structure of the suture is coated. Coating material of Coated suture is prepared by Calcium Stearate and Polycaprolactone structure.

In order to ease of operation, ALCASORB® RAPID sutures are undyed (natural, beige). ALCASORB® RAPID sutures have been presented in USP 6/0 – USP 2 gauge sizes in a variety of lengths from 10 cm to 150cm, as non-needled or attached to stainless steel needles of varying types and sizes. ALCASORB® RAPID sutures are sterilized by Gamma irradiation.

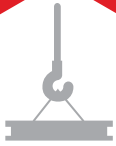
ALCASORB® RAPID

|                                                                                   |                                                                        |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------|
|  | Absorbable, multifilament, coated, undyed (beige)                      |
| <b>CHEMICAL STRUCTURE</b>                                                         | 100% Polyglycolic Acid, synthetic, absorbable, braided surgical suture |
| <b>COATING</b>                                                                    | Polycaprolactone and Calcium Stearate                                  |
| <b>WOUND SUPPORT</b>                                                              | ~ 10-14 days                                                           |
| <b>ABSORPTION</b>                                                                 | ~ 40-45 days                                                           |
| <b>TENSILE STRENGTH</b>                                                           | 5 <sup>th</sup> day ~ 50%<br>14 <sup>th</sup> day ~ 0% wound support   |
| <b>USP RANGE</b>                                                                  | 6/0 - 2                                                                |
| <b>STERILIZATION</b>                                                              | Gamma Irradiation                                                      |
| <b>PACKAGING</b>                                                                  | In aluminium foil packages, with needle or without needle              |



### HIGH INITIAL TENSILE STRENGTH

Excellent  
wound support



### BRAIDED STRUCTURE

Minimum suture memory  
High usage characteristic  
Flexibility  
Excellent tensile strength  
Excellent knot safety



### ABSORPTION BY PROGRESSIVE HYDROLYSIS

Predictable absorption rate  
Rapid absorption



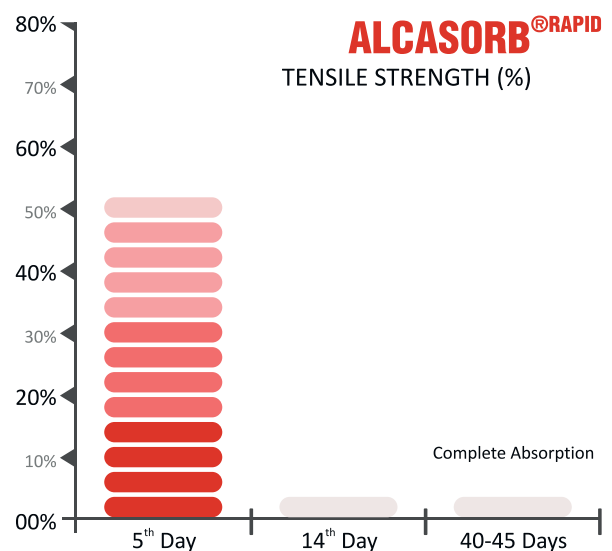
### COATED MULTIFILAMENT

Minimum wound trauma  
Minimum capillarity  
Ease of knot tying and adjustability



## AREAS OF USAGE

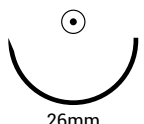
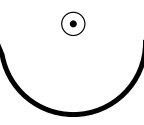
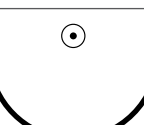
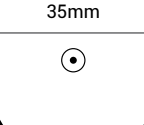
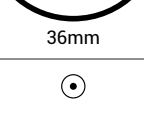
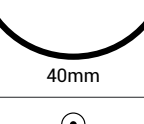
- Urology
- Odontology
- Gynecology
- Pediatric Surgery
- Oral Surgery
- Plastic Surgery
- Skin Closure



1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                | SUTURE LENGTH | COLOR          | USP        |            |            |            |            |
|--------------------------------------------------------------------------------------------|---------------|----------------|------------|------------|------------|------------|------------|
|                                                                                            |               |                | 6/0        | 5/0        | 4/0        | 3/0        | 2/0        |
| <br>13mm  | 75cm          | undyed (beige) | B0813Z1T75 | B0713Z1T75 |            |            |            |
| <br>16mm  | 75cm          | undyed (beige) | B0816Z1T75 | B0716Z1T75 | B0616Z1T75 |            |            |
| <br>18mm  | 75cm          | undyed (beige) |            |            | B0618Z1T75 | B0518Z1T75 |            |
| <br>20mm  | 75cm          | undyed (beige) |            |            | B0620Z1T75 | B0520Z1T75 | B0420Z1T75 |
| <br>22mm  | 75cm          | undyed (beige) |            |            | B0622Z1T75 | B0522Z1T75 |            |
| <br>25mm | 75cm          | undyed (beige) |            |            | B0625Z1T75 | B0525Z1T75 | B0425Z1T75 |

# 1/2 CIRCLE TAPER POINT

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR             | USP                      |                          |                          |                          |                          |                          |
|---------------------------------------------------------------------------------------------|------------------|-------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                             |                  |                   | 4/0                      | 3/0                      | 2/0                      | 0                        | 1                        | 2                        |
| <br>26mm   | 75cm<br>90cm     | undyed<br>(beige) | B0626Z1T75<br>B0626Z1T90 | B0526Z1T75<br>B0526Z1T90 | B0426Z1T75<br>B0426Z1T90 | B0326Z1T75<br>B0326Z1T90 |                          |                          |
| <br>30mm   | 75cm             | undyed<br>(beige) |                          | B0530Z1T75               | B0430Z1T75               | B0330Z1T75               | B0230Z1T75               |                          |
| <br>35mm   | 75cm             | undyed<br>(beige) |                          |                          | B0435Z1T75               | B0335Z1T75               | B0235Z1T75               |                          |
| <br>36mm   | 75cm<br>90cm     | undyed<br>(beige) |                          | B0536Z1T75<br>B0536Z1T90 | B0436Z1T75<br>B0436Z1T90 |                          |                          |                          |
| <br>40mm   | 75cm<br>90cm     | undyed<br>(beige) |                          |                          | B0440Z1T75               | B0340Z1T75<br>B0340Z1T90 | B0240Z1T75<br>B0240Z1T90 | B0140Z1T75<br>B0140Z1T90 |
| <br>45mm  | 75cm<br>90cm     | undyed<br>(beige) |                          |                          |                          | B0345Z1T75               | B0245Z1T75<br>B0245Z1T90 | B0145Z1T75<br>B0145Z1T90 |
| <br>50mm | 75cm<br>90cm     | undyed<br>(beige) |                          |                          |                          |                          | B0250Z1T75               | B0150Z1T75<br>B0150Z1T90 |

## 1/2 CIRCLE CUTTING EDGE

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR             | USP        |            |                          |                          |                          |                          |                          |
|---------------------------------------------------------------------------------------------|------------------|-------------------|------------|------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                             |                  |                   | 5/0        | 4/0        | 3/0                      | 2/0                      | 0                        | 1                        | 2                        |
| <br>16mm   | 75cm             | undyed<br>(beige) | B0716Z3T75 | B0616Z3T75 |                          |                          |                          |                          |                          |
| <br>19mm   | 75cm             | undyed<br>(beige) |            | B0619Z3T75 | B0519Z3T75               |                          |                          |                          |                          |
| <br>20mm   | 75cm             | undyed<br>(beige) |            | B0620Z3T75 | B0520Z3T75               | B0420Z3T75               |                          |                          |                          |
| <br>25mm   | 75cm             | undyed<br>(beige) |            |            | B0525Z3T75               | B0425Z3T75               |                          |                          |                          |
| <br>26mm   | 75cm<br>90cm     | undyed<br>(beige) |            |            | B0526Z3T75<br>B0526Z3T90 | B0426Z3T75<br>B0426Z3T90 | B0326Z3T75<br>B0326Z3T90 |                          |                          |
| <br>30mm   | 75cm             | undyed<br>(beige) |            |            |                          | B0430Z3T75               | B0330Z3T75               |                          |                          |
| <br>40mm | 75cm<br>90cm     | undyed<br>(beige) |            |            |                          |                          | B0340Z3T75               | B0240Z3T75<br>B0240Z3T90 |                          |
| <br>48mm | 75cm<br>90cm     | undyed<br>(beige) |            |            |                          |                          |                          | B0248Z3T75               | B0148Z3T75<br>B0148Z3T90 |

### 3/8 CIRCLE CUTTING EDGE

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR             | USP                      |                          |                          |                          |                          |
|---------------------------------------------------------------------------------------------|------------------|-------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                             |                  |                   | 6/0                      | 5/0                      | 4/0                      | 3/0                      | 2/0                      |
| <br>13mm   | 60cm<br>75cm     | undyed<br>(beige) | B0813V3T60<br>B0813V3T75 | B0713V3T75               |                          |                          |                          |
| <br>16mm   | 60cm<br>75cm     | undyed<br>(beige) | B0816V3T60<br>B0816V3T75 | B0716V3T60<br>B0716V3T75 | B0616V3T60<br>B0616V3T75 | B0516V3T75               |                          |
| <br>19mm   | 75cm             | undyed<br>(beige) |                          |                          | B0619V3T75               |                          |                          |
| <br>20mm   | 75cm<br>90cm     | undyed<br>(beige) |                          |                          | B0620V3T75               | B0520V3T75<br>B0520V3T90 |                          |
| <br>22mm   | 75cm             | undyed<br>(beige) |                          |                          | B0622V3T75               | B0522V3T75               |                          |
| <br>25mm   | 75cm             | undyed<br>(beige) |                          |                          |                          | B0525V3T75               | B0425V3T75               |
| <br>26mm  | 75cm<br>90cm     | undyed<br>(beige) |                          |                          |                          | B0526V3T75<br>B0526V3T90 | B0426V3T75<br>B0426V3T90 |
| <br>30mm | 75cm<br>90cm     | undyed<br>(beige) |                          |                          |                          |                          | B0430V3T75<br>B0430V3T90 |
| <br>35mm | 75cm<br>90cm     | undyed<br>(beige) |                          |                          |                          | B0535V3T75<br>B0535V3T90 | B0435V3T75<br>B0435V3T90 |

### SUTURES WITHOUT NEEDLE

| USP | 150cm    | 250cm    | 6x45cm   | 12x45cm  | 10x50cm  | 17x45cm  |
|-----|----------|----------|----------|----------|----------|----------|
| 4/0 | B06X1501 | B06X2501 | B06X4506 |          |          |          |
| 3/0 | B05X1501 | B05X2501 | B05X4506 | B05X4512 |          | B05X4517 |
| 2/0 | B04X1501 | B04X2501 | B04X4506 | B04X4512 | B04X5010 | B04X4517 |
| 0   | B03X1501 | B03X2501 | B03X4506 | B03X4512 | B03X5010 |          |
| 1   | B02X1501 | B02X2501 | B02X4506 |          |          |          |
| 2   | B01X1501 | B01X2501 |          |          |          |          |





**ALCALACTINE®**

High tensile strength,  
excellent performance

## PGLA - Poly (glycolic acid (90%)-co-lactic acid (10%))

ALCALACTINE® sutures are synthetic absorbable sterile surgical sutures which are composed of a copolymer made from 90% glycolide and 10% L-lactic acid. The braided structure of the suture is coated. Coating material of coated suture is prepared by Calcium Stearate and Polyglycolic Acid (30%), - Lactic Acid (70%) mixture.

In order to ease of operation, ALCALACTINE® sutures are coloured FDA approved D&C violet No:2. ALCALACTINE® sutures have been presented in USP 6/0 – USP 2 gauge sizes in a variety of lengths from 10 cm to 150cm , as non-needled or attached to stainless steel needles of varying types and throws as warranted by surgical circumstance and the sizes.

ALCALACTINE®



Absorbable, multifilament, coated, violet

### CHEMICAL STRUCTURE

90% glycolide and 10% L-lactic acid synthetic, absorbable, braided surgical suture

### COATING

Poly (glycolide-co-L-lactide) and Calcium Stearate

### WOUND SUPPORT

~ 30 days

### ABSORPTION

~ 56-70 days

### TENSILE STRENGTH

2<sup>nd</sup> week ~ 75%  
3<sup>rd</sup> week ~ 40%-50% wound support

### USP RANGE

6/0 - 2

### STERILIZATION

EO (Ethylene Oxide)

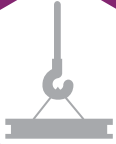
### PACKAGING

In aluminium foil packages, with needle or without needle



## HIGH TENSILE STRENGTH

Excellent wound support



## BRAIDED STRUCTURE

Minimum suture memory  
High usage characteristic  
Flexibility  
Excellent tensile strength  
Excellent knot safety



## ABSORPTION BY PROGRESSIVE HYDROLYSIS

Predictable absorption rate



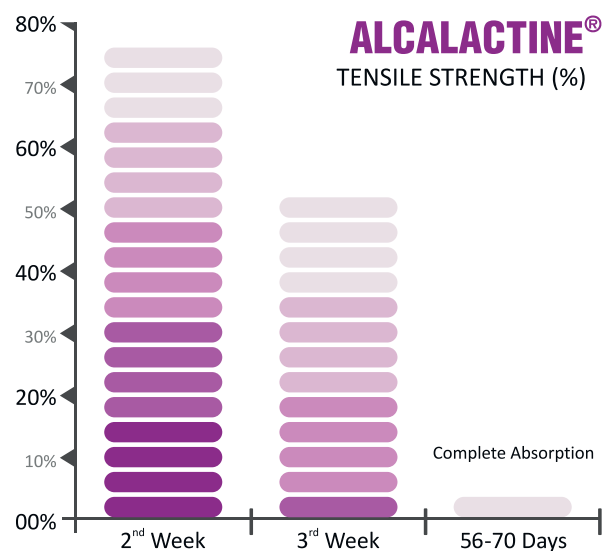
## COATED MULTIFILAMENT

Minimum tissue trauma  
Minimum capillarity  
Ease of knot tying and adjustability



## AREAS OF USAGE

- General Surgery
- Gastrointestinal Surgery
- Gynecology
- Urology
- General Soft Tissue Approximation and / or Ligation
- Skin Closure
- Orthopedic Surgery





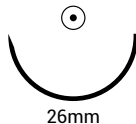
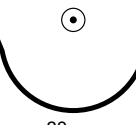
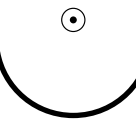
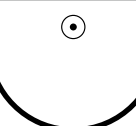
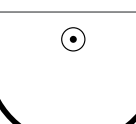
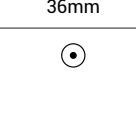
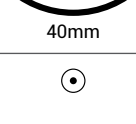
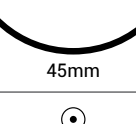
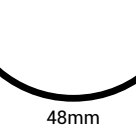
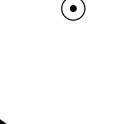
## 1/4 CIRCLE SPATULA

| NEEDLE TYPE                                                                                     | SUTURE LENGTH | COLOR  | USP        |            |
|-------------------------------------------------------------------------------------------------|---------------|--------|------------|------------|
|                                                                                                 |               |        | 6/0        | 5/0        |
| <br>8mm Double | 45cm          | violet | C0808R7F45 | C0708R7F45 |

## 1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH        | COLOR  | USP                      |                                        |            |            |            |   |            |            |
|---------------------------------------------------------------------------------------------|----------------------|--------|--------------------------|----------------------------------------|------------|------------|------------|---|------------|------------|
|                                                                                             |                      |        | 6/0                      | 5/0                                    | 4/0        | 3/0        | 2/0        | 0 | 1          | 2          |
| <br>9mm    | 75cm                 | violet | C0809Z1T75               |                                        |            |            |            |   |            |            |
| <br>10mm   | 45cm<br>60cm         | violet | C0810Z1T45<br>C0810Z1T60 | C0710Z1T45<br>C0710Z1T60               |            |            |            |   |            |            |
| <br>13mm   | 45cm<br>60cm<br>75cm | violet | C0813Z1T45<br>C0813Z1T60 | C0713Z1T45<br>C0713Z1T60<br>C0713Z1T75 | C0613Z1T60 |            |            |   |            |            |
| <br>16mm  | 75cm                 | violet |                          | C0716Z1T75                             | C0616Z1T75 | C0516Z1T75 |            |   |            |            |
| <br>17mm | 75cm                 | violet |                          | C0717Z1T75                             | C0617Z1T75 | C0517Z1T75 |            |   |            |            |
| <br>18mm | 75cm                 | violet |                          |                                        | C0618Z1T75 | C0518Z1T75 |            |   |            |            |
| <br>20mm | 75cm                 | violet |                          |                                        | C0620Z1T75 | C0520Z1T75 |            |   |            |            |
| <br>22mm | 75cm                 | violet |                          |                                        | C0622Z1T75 | C0522Z1T75 | C0422Z1T75 |   |            |            |
| <br>24mm | 75cm                 | violet |                          |                                        |            | C0524Z1T75 |            |   |            |            |
| <br>25mm | 75cm                 | violet |                          |                                        |            | C0525Z1T75 | C0425Z1T75 |   | C0225Z1T75 | C0125Z1T75 |

## 1/2 CIRCLE TAPER POINT

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR  | USP                      |                          |                          |                          |                          |                          |
|---------------------------------------------------------------------------------------------|------------------|--------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                             |                  |        | 4/0                      | 3/0                      | 2/0                      | 0                        | 1                        | 2                        |
| <br>26mm   | 75cm<br>90cm     | violet | C0626Z1T75<br>C0626Z1T90 | C0526Z1T75<br>C0526Z1T90 | C0426Z1T75<br>C0426Z1T90 | C0326Z1T75<br>C0326Z1T90 |                          |                          |
| <br>30mm   | 75cm<br>90cm     | violet |                          | C0530Z1T75               | C0430Z1T75               | C0330Z1T75<br>C0330Z1T90 | C0230Z1T75<br>C0230Z1T90 |                          |
| <br>32mm   | 75cm<br>90cm     | violet |                          |                          |                          | C0332Z1T75               |                          |                          |
| <br>35mm   | 75cm<br>90cm     | violet |                          |                          | C0435Z1T75               | C0335Z1T75<br>C0335Z1T90 | C0235Z1T75<br>C0235Z1T90 | C0135Z1T75               |
| <br>36mm   | 75cm             | violet |                          |                          | C0436Z1T75               | C0336Z1T75               |                          |                          |
| <br>40mm  | 75cm<br>90cm     | violet |                          |                          | C0440Z1T75               | C0340Z1T75               | C0240Z1T75<br>C0240Z1T90 | C0140Z1T75<br>C0140Z1T90 |
| <br>45mm | 75cm<br>90cm     | violet |                          |                          |                          |                          | C0245Z1T75<br>C0245Z1T90 | C0145Z1T75<br>C0145Z1T90 |
| <br>48mm | 75cm<br>90cm     | violet |                          |                          |                          |                          | C0248Z1T75               | C0148Z1T75<br>C0148Z1T90 |
| <br>50mm | 75cm<br>90cm     | violet |                          |                          |                          | C0350Z1T75               | C0250Z1T75               | C0150Z1T75<br>C0150Z1T90 |
| <br>65mm | 75cm<br>90cm     | violet |                          |                          |                          |                          |                          | C0165Z1T75               |

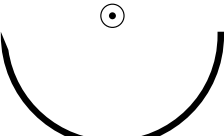
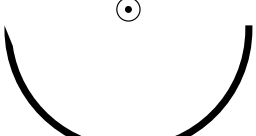
## 1/2 CIRCLE CUTTING EDGE

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR  | USP        |            |            |                          |                          |            |                          |                          |
|---------------------------------------------------------------------------------------------|------------------|--------|------------|------------|------------|--------------------------|--------------------------|------------|--------------------------|--------------------------|
|                                                                                             |                  |        | 6/0        | 5/0        | 4/0        | 3/0                      | 2/0                      | 0          | 1                        | 2                        |
| <br>9mm    | 75cm             | violet | C0809Z3T75 |            |            |                          |                          |            |                          |                          |
| <br>16mm   | 75cm             | violet |            | C0716Z3T75 |            |                          |                          |            |                          |                          |
| <br>17mm   | 75cm             | violet |            |            | C0617Z3T75 |                          |                          |            |                          |                          |
| <br>20mm   | 75cm             | violet |            | C0720Z3T75 | C0620Z3T75 |                          |                          |            |                          |                          |
| <br>22mm   | 75cm             | violet |            |            |            | C0522Z3T75               |                          |            |                          |                          |
| <br>24mm   | 75cm             | violet |            |            |            | C0524Z3T75               |                          |            |                          |                          |
| <br>25mm   | 75cm             | violet |            |            |            |                          | C0425Z3T75               | C0325Z3T75 | C0225Z3T75               |                          |
| <br>26mm   | 75cm<br>90cm     | violet |            |            |            | C0526Z3T75<br>C0526Z3T90 | C0426Z3T75<br>C0426Z3T90 |            |                          |                          |
| <br>30mm   | 75cm<br>90cm     | violet |            |            |            |                          | C0430Z3T75<br>C0430Z3T90 | C0330Z3T75 |                          |                          |
| <br>35mm | 75cm             | violet |            |            |            |                          |                          | C0335Z3T75 | C0235Z3T75               |                          |
| <br>36mm | 75cm             | violet |            |            |            |                          |                          |            |                          | C0136Z3T75               |
| <br>40mm | 75cm<br>90cm     | violet |            |            |            |                          |                          |            | C0240Z3T75<br>C0240Z3T90 | C0140Z3T75<br>C0140Z3T90 |
| <br>50mm | 75cm<br>90cm     | violet |            |            |            |                          |                          |            |                          | C0150Z3T75<br>C0150Z3T90 |

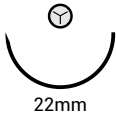
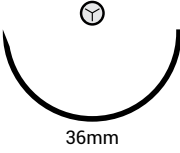
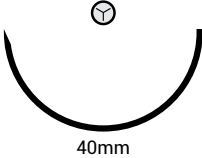
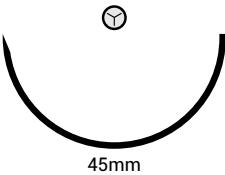
# 1/2 CIRCLE REVERSE CUTTING EDGE

| NEEDLE TYPE                                                                               | SUTURE LENGTH | COLOR  | USP        |     |     |            |                          |                          |                          |
|-------------------------------------------------------------------------------------------|---------------|--------|------------|-----|-----|------------|--------------------------|--------------------------|--------------------------|
|                                                                                           |               |        | 5/0        | 4/0 | 3/0 | 2/0        | 0                        | 1                        | 2                        |
| <br>13mm | 45cm<br>75cm  | violet | C0713Z4T45 |     |     |            |                          |                          |                          |
| <br>26mm | 75cm          | violet |            |     |     | C0426Z4T75 | C0326Z4T75               | C0226Z4T75               |                          |
| <br>40mm | 75cm<br>90cm  | violet |            |     |     |            | C0340Z4T75<br>C0340Z4T90 | C0240Z4T75<br>C0240Z4T90 |                          |
| <br>48mm | 75cm<br>90cm  | violet |            |     |     |            | C0348Z4T75               | C0248Z4T75<br>C0248Z4T90 | C0148Z4T75<br>C0148Z4T90 |

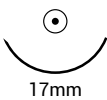
# 1/2 CIRCLE TAPER POINT (HEAVY)

| NEEDLE TYPE                                                                                         | SUTURE LENGTH | COLOR  | USP          |              |
|-----------------------------------------------------------------------------------------------------|---------------|--------|--------------|--------------|
|                                                                                                     |               |        | 1            | 2            |
| <br>45mm (HEAVY) | 75cm          | violet | C0245Z1T75HV |              |
| <br>50mm (HEAVY) | 75cm          | violet |              | C0150Z1T75HV |

## 1/2 CIRCLE TAPER CUT

| NEEDLE TYPE                                                                               | SUTURE LENGTH | COLOR  | USP                      |                          |                          |                          |                          |            |
|-------------------------------------------------------------------------------------------|---------------|--------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
|                                                                                           |               |        | 4/0                      | 3/0                      | 2/0                      | 0                        | 1                        | 2          |
| <br>22mm | 75cm<br>90cm  | violet | C0622Z5T75<br>C0622Z5T90 | C0522Z5T75<br>C0522Z5T90 | C0422Z5T75<br>C0422Z5T90 |                          |                          |            |
| <br>36mm | 75cm<br>90cm  | violet |                          | C0536Z5T75<br>C0536Z5T90 | C0436Z5T75<br>C0436Z5T90 | C0336Z5T75<br>C0336Z5T90 | C0236Z5T75               |            |
| <br>40mm | 75cm<br>90cm  | violet |                          |                          | C0440Z5T75               | C0340Z5T75<br>C0340Z5T90 | C0240Z5T75<br>C0240Z5T90 |            |
| <br>45mm | 75cm<br>90cm  | violet |                          |                          |                          | C0345Z5T75<br>C0345Z5T90 | C0245Z5T75<br>C0245Z5T90 | C0145Z5T90 |

## 3/8 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP                      |            |            |
|---------------------------------------------------------------------------------------------|---------------|--------|--------------------------|------------|------------|
|                                                                                             |               |        | 6/0                      | 5/0        | 4/0        |
| <br>13mm | 60cm<br>75cm  | violet | C0813V1T60<br>C0813V1T75 | C0713V1T75 | C0613V1T75 |
| <br>17mm | 75cm          | violet |                          | C0717V1T75 | C0617V1T75 |

## 3/8 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP                      |                          |                          |                          |                          |
|---------------------------------------------------------------------------------------------|---------------|--------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                             |               |        | 5/0                      | 4/0                      | 3/0                      | 2/0                      | 0                        |
| <br>13mm | 60cm<br>75cm  | violet | C0713V3T75               |                          |                          |                          |                          |
| <br>16mm | 60cm<br>75cm  | violet | C0716V3T60<br>C0716V3T75 | C0616V3T60<br>C0616V3T75 | C0516V3T75               |                          |                          |
| <br>17mm | 60cm<br>75cm  | violet |                          | C0617V3T75               |                          |                          |                          |
| <br>20mm | 75cm          | violet |                          | C0620V3T75               | C0520V3T75               |                          |                          |
| <br>26mm | 75cm<br>90cm  | violet |                          | C0626V3T75               | C0526V3T75<br>C0526V3T90 | C0426V3T75<br>C0426V3T90 |                          |
| <br>30mm | 75cm<br>90cm  | violet |                          |                          | C0530V3T75               | C0430V3T75<br>C0430V3T90 | C0330V3T75<br>C0330V3T90 |

### 3/8 CIRCLE REVERSE CUTTING EDGE

| NEEDLE TYPE                                                                                      | SUTURE LENGTH | COLOR  | USP                      |                          |                          |                          |                          |                          |
|--------------------------------------------------------------------------------------------------|---------------|--------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                                  |               |        | 5/0                      | 4/0                      | 3/0                      | 2/0                      | 1                        | 2                        |
| <br>13mm        | 75cm          | violet | C0713V4T75               | C0613V4T75               |                          |                          |                          |                          |
| <br>13mm Double | 45cm<br>60cm  | violet | C0713V4F45<br>C0713V4F60 |                          |                          |                          |                          |                          |
| <br>18mm        | 45cm<br>75cm  | violet |                          | C0618V4T45<br>C0618V4T75 |                          |                          |                          |                          |
| <br>26mm        | 75cm<br>90cm  | violet |                          |                          | C0526V4T75<br>C0526V4T90 | C0426V4T75<br>C0426V4T90 |                          |                          |
| <br>36mm        | 75cm<br>90cm  | violet |                          |                          |                          | C0436V4T75<br>C0436V4T90 | C0236V4T75               |                          |
| <br>48mm        | 75cm<br>90cm  | violet |                          |                          |                          |                          | C0248V4T75<br>C0248V4T90 | C0148V4T75<br>C0148V4T90 |

### 3/8 CIRCLE TAPER CUT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP        |            |            |
|---------------------------------------------------------------------------------------------|---------------|--------|------------|------------|------------|
|                                                                                             |               |        | 5/0        | 4/0        | 3/0        |
| <br>17mm | 75cm          | violet | C0717V5T75 | C0617V5T75 | C0517V5T75 |

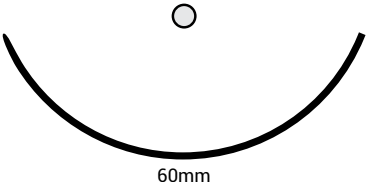
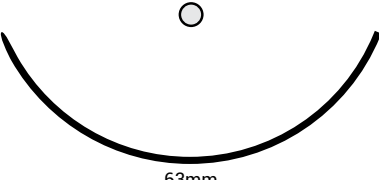
### 5/8 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP                      |                          |
|---------------------------------------------------------------------------------------------|---------------|--------|--------------------------|--------------------------|
|                                                                                             |               |        | 2/0                      | 0                        |
| <br>26mm | 75cm<br>90cm  | violet | C0426U1T75<br>C0426U1T90 |                          |
| <br>36mm | 75cm<br>90cm  | violet | C0436U1T75<br>C0436U1T90 | C0336U1T75<br>C0336U1T90 |

### STRAIGHT CUTTING

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP                      |                          |                          |
|---------------------------------------------------------------------------------------------|---------------|--------|--------------------------|--------------------------|--------------------------|
|                                                                                             |               |        | 4/0                      | 3/0                      | 2/0                      |
| <br>60mm | 75cm<br>90cm  | violet | C0660S3T75<br>C0660S3T90 | C0560S3T75<br>C0560S3T90 | C0460S3T75<br>C0460S3T90 |

### 3/8 CIRCLE BLUNT POINT

| NEEDLE<br>TYPE                                                                           | SUTURE<br>LENGTH | COLOR  | USP                      |                          |
|------------------------------------------------------------------------------------------|------------------|--------|--------------------------|--------------------------|
|                                                                                          |                  |        | 1                        | 2                        |
| <br>60mm | 75cm<br>90cm     | violet | C0260V2T75<br>C0260V2T90 | C0160V2T75<br>C0160V2T90 |
| <br>63mm | 75cm<br>90cm     | violet | C0263V2T75               | C0163V2T75<br>C0163V2T90 |

### SUTURES WITHOUT NEEDLE

| USP | 150cm    | 250cm    | 75cm    | 6x45cm   | 12x45cm  | 10x50cm  | 17x45cm  |
|-----|----------|----------|---------|----------|----------|----------|----------|
| 4/0 | C06X1501 | C06X2501 |         | C06X4506 |          |          |          |
| 3/0 | C05X1501 | C05X2501 | C05X751 | C05X4506 | C05X4512 |          | C05X4517 |
| 2/0 | C04X1501 | C04X2501 | C04X751 | C04X4506 | C04X4512 | C04X5010 | C04X4517 |
| 0   | C03X1501 | C03X2501 | C03X751 | C03X4506 | C03X4512 | C03X5010 |          |
| 1   | C02X1501 | C02X2501 | C02X751 | C02X4506 |          |          |          |

### 1/2 CIRCLE SPATULA

| NEEDLE<br>TYPE                                                                                              | SUTURE<br>LENGTH | COLOR  | USP        |
|-------------------------------------------------------------------------------------------------------------|------------------|--------|------------|
|                                                                                                             |                  |        | 6/0        |
| <br>6mm (PREMIUM)        | 75cm             | violet | C0806Z7T75 |
| <br>8mm double (PREMIUM) | 45cm             | violet | C0808Z7F45 |
|                                                                                                             | 75cm             |        | C0808Z7F75 |
| <br>8mm (PREMIUM)        | 45cm             | violet | C0808Z7T45 |

# ALCALACTINE® RAPID

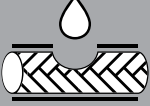
Best solution for  
short-term wound support



## PGLAR - Poly (glycolic acid (90%)-co-lactic acid (10%)) Rapid

ALCALACTINE® RAPID sutures are synthetic absorbable sterile surgical sutures which are composed of a copolymer made from 90% glycolide and 10% L-lactic acid. The braided structure of the suture is coated. Coating material of coated suture is prepared by Calcium Stearate and Polyglycolic Acid (30%), - Lactic Acid (70%) mixture. ALCALACTINE® RAPID sutures are sterilized by Gamma Irradiation.

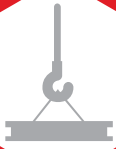
In order to ease of operation, ALCALACTINE® RAPID sutures are undyed (natural, beige). ALCALACTINE® RAPID sutures have been presented in USP 6/0 – USP 2 gauge sizes in a variety of lengths from 10 cm to 150 cm, as non-needed or attached to stainless steel needles of varying types and sizes.

|                                                                                   |                                                                                    |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|  | Absorbable, multifilament, coated, undyed (beige)                                  |
| <b>CHEMICAL STRUCTURE</b>                                                         | 90% glycolide and 10% L-lactic acid synthetic, absorbable, braided surgical suture |
| <b>COATING</b>                                                                    | Poly (glycolide-co-L-lactide) and Calcium Stearate                                 |
| <b>WOUND SUPPORT</b>                                                              | ~ 10-14 days                                                                       |
| <b>ABSORPTION</b>                                                                 | ~ 40-45 days                                                                       |
| <b>TENSILE STRENGTH</b>                                                           | 5 <sup>th</sup> day ~ 50%<br>14 <sup>th</sup> day ~ 0% wound support               |
| <b>USP RANGE</b>                                                                  | 6/0 - 2                                                                            |
| <b>STERILIZATION</b>                                                              | Gamma Irradiation                                                                  |
| <b>PACKAGING</b>                                                                  | In aluminium foil packages, with needle or without needle                          |



### HIGH INITIAL TENSILE STRENGTH

Excellent wound support



### BRAIDED STRUCTURE

Minimum suture memory  
High usage characteristic  
Flexibility  
Excellent tensile strength  
Excellent knot safety



### ABSORPTION BY PROGRESSIVE HYDROLYSIS

Predictable absorption rate



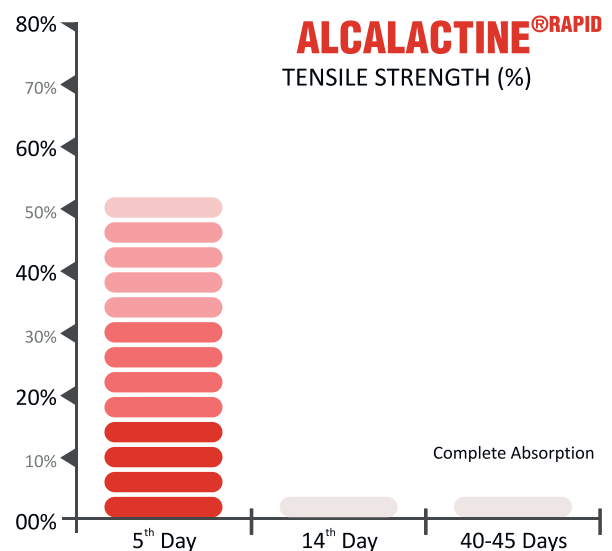
### COATED MULTIFILAMENT

Minimum wound trauma  
Minimum capillarity  
Ease of knot tying and adjustability



## AREAS OF USAGE

- Urology
- Superficial Soft Tissue Approximation
- Odontology
- Gynecology
- Pediatric Surgery

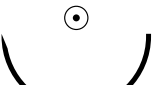




## 1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR          | USP        |            |            |                          |                          |
|---------------------------------------------------------------------------------------------|---------------|----------------|------------|------------|------------|--------------------------|--------------------------|
|                                                                                             |               |                | 6/0        | 5/0        | 4/0        | 3/0                      | 2/0                      |
| <br>13mm   | 75cm          | undyed (beige) | D0813Z1T75 | D0713Z1T75 |            |                          |                          |
| <br>16mm   | 75cm          | undyed (beige) | D0816Z1T75 | D0716Z1T75 | D0616Z1T75 |                          |                          |
| <br>17mm   | 75cm          | undyed (beige) |            |            | D0617Z1T75 |                          |                          |
| <br>18mm   | 75cm          | undyed (beige) |            |            | D0618Z1T75 | D0518Z1T75               |                          |
| <br>20mm   | 75cm          | undyed (beige) |            |            | D0620Z1T75 | D0520Z1T75               | D0420Z1T75               |
| <br>22mm   | 75cm          | undyed (beige) |            |            | D0622Z1T75 | D0522Z1T75               |                          |
| <br>24mm | 75cm          | undyed (beige) |            |            |            | D0524Z1T75               | D0424Z1T75               |
| <br>25mm | 75cm<br>90cm  | undyed (beige) |            |            | D0625Z1T75 | D0525Z1T75<br>D0525Z1T90 | D0425Z1T75<br>D0425Z1T90 |

## 1/2 CIRCLE TAPER POINT

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR             | USP                      |                          |                          |                          |                          |                          |
|---------------------------------------------------------------------------------------------|------------------|-------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                             |                  |                   | 4/0                      | 3/0                      | 2/0                      | 0                        | 1                        | 2                        |
| <br>26mm   | 75cm<br>90cm     | undyed<br>(beige) | D0626Z1T75<br>D0626Z1T90 | D0526Z1T75<br>D0526Z1T90 | D0426Z1T75<br>D0426Z1T90 | D0326Z1T75<br>D0326Z1T90 |                          |                          |
| <br>30mm   | 75cm             | undyed<br>(beige) |                          | D0530Z1T75               | D0430Z1T75               | D0330Z1T75               | D0230Z1T75               |                          |
| <br>35mm   | 75cm             | undyed<br>(beige) |                          |                          | D0435Z1T75               | D0335Z1T75               | D0235Z1T75               |                          |
| <br>36mm   | 75cm             | undyed<br>(beige) |                          | D0536Z1T75               | D0436Z1T75               | D0336Z1T75               |                          |                          |
| <br>40mm   | 75cm<br>90cm     | undyed<br>(beige) |                          |                          | D0440Z1T75               | D0340Z1T75<br>D0340Z1T90 | D0240Z1T75<br>D0240Z1T90 | D0140Z1T75               |
| <br>45mm | 75cm<br>90cm     | undyed<br>(beige) |                          |                          |                          | D0345Z1T75               | D0245Z1T75<br>D0245Z1T90 | D0145Z1T75<br>D0145Z1T90 |
| <br>50mm | 75cm<br>90cm     | undyed<br>(beige) |                          |                          |                          |                          | D0250Z1T75<br>D0250Z1T90 | D0150Z1T75<br>D0150Z1T90 |

## 1/2 CIRCLE CUTTING EDGE

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR             | USP        |            |                          |                          |            |                          |                          |
|---------------------------------------------------------------------------------------------|------------------|-------------------|------------|------------|--------------------------|--------------------------|------------|--------------------------|--------------------------|
|                                                                                             |                  |                   | 5/0        | 4/0        | 3/0                      | 2/0                      | 0          | 1                        | 2                        |
| <br>16mm   | 75cm             | undyed<br>(beige) | D0716Z3T75 | D0616Z3T75 |                          |                          |            |                          |                          |
| <br>19mm   | 75cm             | undyed<br>(beige) |            | D0619Z3T75 | D0519Z3T75               |                          |            |                          |                          |
| <br>20mm   | 75cm             | undyed<br>(beige) |            | D0620Z3T75 | D0520Z3T75               | D0420Z3T75               |            |                          |                          |
| <br>24mm   | 75cm             | undyed<br>(beige) |            |            | D0524Z3T75               |                          |            |                          |                          |
| <br>25mm   | 75cm             | undyed<br>(beige) |            |            | D0525Z3T75               | D0425Z3T75               |            |                          |                          |
| <br>26mm   | 75cm<br>90cm     | undyed<br>(beige) |            |            | D0526Z3T75<br>D0526Z3T90 | D0426Z3T75<br>D0426Z3T90 |            |                          |                          |
| <br>30mm  | 75cm             | undyed<br>(beige) |            |            |                          | D0430Z3T75               |            |                          |                          |
| <br>40mm | 75cm<br>90cm     | undyed<br>(beige) |            |            |                          |                          | D0340Z3T75 | D0240Z3T75<br>D0240Z3T90 |                          |
| <br>48mm | 75cm<br>90cm     | undyed<br>(beige) |            |            |                          |                          |            | D0248Z3T75<br>D0248Z3T90 | D0148Z3T75<br>D0148Z3T90 |

### 3/8 CIRCLE CUTTING EDGE

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR             | USP                      |                          |                          |                          |                          |
|---------------------------------------------------------------------------------------------|------------------|-------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                             |                  |                   | 6/0                      | 5/0                      | 4/0                      | 3/0                      | 2/0                      |
| <br>13mm   | 75cm             | undyed<br>(beige) | D0813V3T75               | D0713V3T75               |                          |                          |                          |
| <br>16mm   | 60cm<br>75cm     | undyed<br>(beige) | D0816V3T60<br>D0816V3T75 | D0716V3T60<br>D0716V3T75 | D0616V3T60<br>D0616V3T75 | D0516V3T75               |                          |
| <br>20mm   | 75cm             | undyed<br>(beige) |                          |                          | D0620V3T75               | D0520V3T75               |                          |
| <br>22mm   | 75cm             | undyed<br>(beige) |                          |                          | D0622V3T75               | D0522V3T75               |                          |
| <br>25mm   | 75cm             | undyed<br>(beige) |                          |                          |                          | D0525V3T75               | D0425V3T75               |
| <br>26mm   | 75cm<br>90cm     | undyed<br>(beige) |                          |                          |                          | D0526V3T75<br>D0526V3T90 | D0426V3T75<br>D0426V3T90 |
| <br>30mm  | 75cm             | undyed<br>(beige) |                          |                          |                          | D0530V3T75               | D0430V3T75               |
| <br>35mm | 75cm<br>90cm     | undyed<br>(beige) |                          |                          |                          | D0535V3T75<br>D0535V3T90 | D0435V3T75<br>D0435V3T90 |

### SUTURES WITHOUT NEEDLE

| USP | 150cm    | 250cm    | 6x45cm   | 12x45cm  | 10x50cm  | 17x45cm  |
|-----|----------|----------|----------|----------|----------|----------|
| 4/0 | D06X1501 | D06X2501 | D06X4506 |          |          |          |
| 3/0 | D05X1501 | D05X2501 | D05X4506 | D05X4512 |          | D05X4517 |
| 2/0 | D04X1501 | D04X2501 | D04X4506 | D04X4512 | D04X5010 | D04X4517 |
| 0   | D03X1501 | D03X2501 | D03X4506 | D03X4512 | D03X5010 |          |
| 1   | D02X1501 | D02X2501 | D02X4506 |          |          |          |
| 2   | D01X1501 | D01X2501 |          |          |          |          |



A man is suspended horizontally by a red aerial silk against a dark background. He is shirtless, wearing light-colored trousers, and has a focused expression. The silk is draped over his back and arms, supporting his weight. The background is a solid dark grey.

# ALCALACTONE®

Easy tissue penetration,  
minimum wound trauma

## PGCL - Poly (glycolic acid (75%)-co-caprolactone (25%))

ALCALACTONE® sutures are synthetic absorbable sterile surgical sutures which are made of Polyglycolide and caprolactone.

In order to ease of operation, ALCALACTONE® sutures are coloured D&G violet No: 2. ALCALACTONE® sutures have been presented in USP 6/0 – USP 2 gauge sizes in a variety of lengths from 10 cm to 150cm , as non-needled or attached to stainless steel needles of varying types and sizes.

|                                                                                   |                                                                                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|  | Absorbable, monofilament, violet                                                        |
| <b>CHEMICAL STRUCTURE</b>                                                         | Poly (glycolic acid (75%)-co-caprolactone (25%)) synthetic, absorbable, surgical suture |
| <b>COATING</b>                                                                    | -                                                                                       |
| <b>WOUND SUPPORT</b>                                                              | ~ 21 days                                                                               |
| <b>ABSORPTION</b>                                                                 | ~ 90-120 days                                                                           |
| <b>TENSILE STRENGTH</b>                                                           | 1 <sup>st</sup> week ~ 60%-70%<br>2 <sup>nd</sup> week ~ 30%-40% wound support          |
| <b>USP RANGE</b>                                                                  | 6/0 - 2                                                                                 |
| <b>STERILIZATION</b>                                                              | EO (Ethylene Oxide)                                                                     |
| <b>PACKAGING</b>                                                                  | In aluminium foil packages, with needle or without needle                               |



### ABSORPTION BY PROGRESSIVE HYDROLYSIS

Predictable absorption rate



### FLEXIBILITY AND SOFTNESS

Superior ease of use  
Easy and safety knot tying

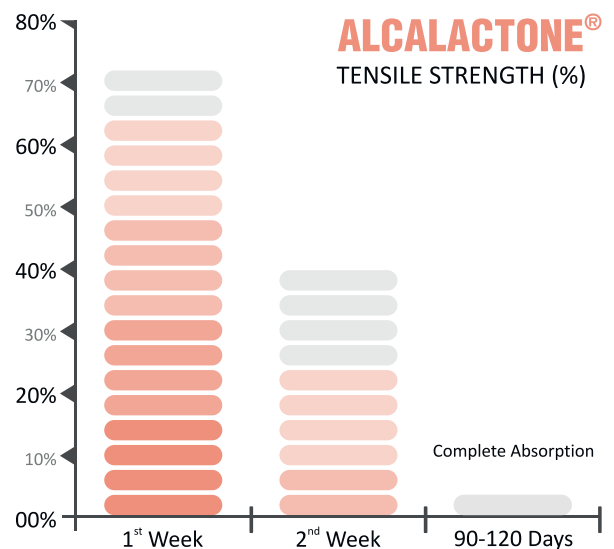


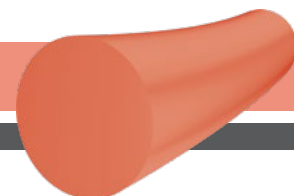
### SMOOTH MONOFILAMENT STRUCTURE AT MICROSCOPIC LEVEL

Minimum wound trauma  
Excellent surface to prevent  
bacterial adherence

## AREAS OF USAGE

- Skin Closure
- General Soft Tissue Approximation and / or Ligation
- Gynecology
- Dermatology
- Plastic Surgery
- Gastrointestinal Surgery
- Urology
- General Surgery
- Ligations





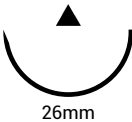
## 1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP        |            |                          |                          |            |
|---------------------------------------------------------------------------------------------|---------------|--------|------------|------------|--------------------------|--------------------------|------------|
|                                                                                             |               |        | 6/0        | 5/0        | 4/0                      | 3/0                      | 2/0        |
| <br>13mm   | 75cm          | violet | G0813Z1T75 | G0713Z1T75 |                          |                          |            |
| <br>16mm   | 75cm          | violet |            | G0716Z1T75 | G0616Z1T75               |                          |            |
| <br>17mm   | 75cm          | violet |            |            | G0617Z1T75               |                          |            |
| <br>18mm   | 75cm          | violet |            |            |                          | G0518Z1T75               |            |
| <br>20mm   | 75cm          | violet |            |            | G0620Z1T75               | G0520Z1T75               |            |
| <br>22mm   | 75cm          | violet |            |            | G0622Z1T75               | G0522Z1T75               |            |
| <br>25mm  | 75cm          | violet |            |            | G0625Z1T75               | G0525Z1T75               | G0425Z1T75 |
| <br>26mm | 75cm<br>90cm  | violet |            |            | G0626Z1T75<br>G0626Z1T90 | G0526Z1T75<br>G0526Z1T90 |            |

## 1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP        |            |                          |                          |                          |
|---------------------------------------------------------------------------------------------|---------------|--------|------------|------------|--------------------------|--------------------------|--------------------------|
|                                                                                             |               |        | 3/0        | 2/0        | 0                        | 1                        | 2                        |
| <br>30mm | 75cm          | violet | G0530Z1T75 | G0430Z1T75 |                          |                          |                          |
| <br>40mm | 75cm<br>90cm  | violet |            | G0440Z1T75 | G0340Z1T75               | G0240Z1T75<br>G0240Z1T90 |                          |
| <br>45mm | 75cm<br>90cm  | violet |            |            |                          | G0245Z1T75<br>G0245Z1T90 | G0145Z1T75<br>G0145Z1T90 |
| <br>50mm | 75cm<br>90cm  | violet |            |            | G0350Z1T75<br>G0350Z1T90 | G0250Z1T75               | G0150Z1T75<br>G0150Z1T90 |

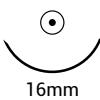
### 1/2 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                               | SUTURE LENGTH | COLOR  | USP        |            |                          |                          |
|-------------------------------------------------------------------------------------------|---------------|--------|------------|------------|--------------------------|--------------------------|
|                                                                                           |               |        | 5/0        | 4/0        | 3/0                      | 2/0                      |
| <br>16mm | 75cm          | violet | G0716Z3T75 | G0616Z3T75 |                          |                          |
| <br>20mm | 75cm          | violet | G0720Z3T75 | G0620Z3T75 | G0520Z3T75               |                          |
| <br>26mm | 75cm<br>90cm  | violet |            |            | G0526Z3T75<br>G0526Z3T90 | G0426Z3T75<br>G0426Z3T90 |

### 3/8 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP        |            |                          |                          |
|---------------------------------------------------------------------------------------------|---------------|--------|------------|------------|--------------------------|--------------------------|
|                                                                                             |               |        | 5/0        | 4/0        | 3/0                      | 2/0                      |
| <br>16mm   | 75cm          | violet | G0716V3T75 | G0616V3T75 |                          |                          |
| <br>19mm   | 75cm          | violet |            | G0619V3T75 | G0519V3T75               |                          |
| <br>20mm | 75cm          | violet |            | G0620V3T75 | G0520V3T75               |                          |
| <br>26mm | 75cm<br>90cm  | violet |            |            | G0526V3T75<br>G0526V3T90 | G0426V3T75<br>G0426V3T90 |

### 3/8 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR  | USP        |                          |                          |
|---------------------------------------------------------------------------------------------|---------------|--------|------------|--------------------------|--------------------------|
|                                                                                             |               |        | 6/0        | 5/0                      | 4/0                      |
| <br>13mm | 75cm          | violet | G0813V1T75 | G0713V1T75               |                          |
| <br>16mm | 60cm<br>75cm  | violet |            | G0716V1T60<br>G0716V1T75 | G0616V1T60<br>G0616V1T75 |

## 3/8 CIRCLE REVERSE CUTTING EDGE

| NEEDLE<br>TYPE                                                                            | SUTURE<br>LENGTH | COLOR  | USP        |                          |                          |                          |
|-------------------------------------------------------------------------------------------|------------------|--------|------------|--------------------------|--------------------------|--------------------------|
|                                                                                           |                  |        | 6/0        | 5/0                      | 4/0                      | 3/0                      |
| <br>13mm | 75cm             | violet | G0813V4T75 | G0713V4T75               |                          |                          |
| <br>16mm | 60cm<br>75cm     | violet |            | G0716V4T60<br>G0716V4T75 | G0616V4T60<br>G0616V4T75 |                          |
| <br>19mm | 75cm             | violet |            | G0719V4T75               | G0619V4T75               |                          |
| <br>24mm | 75cm<br>90cm     | violet |            |                          |                          | G0524V4T75<br>G0524V4T90 |



**ALCADINONE®**

Reliable,  
long-term,  
strong wound support

## PDO - Polydioxanone

ALCADINONE® sutures are synthetic absorbable sterile surgical sutures which are made of Polydioxanone.

In order to ease of operation, ALCADINONE® sutures are coloured FDA approved D&C violet No: 2. ALCADINONE® sutures have been presented in USP 6/0 – USP 2 gauge sizes in a variety of lengths from 10 cm to 150 cm, as non- needled or attached to stainless steel needles of varying types and sizes.

|                                                                                   |                                                                            |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|
|  | Absorbable, monofilament, violet                                           |
| <b>CHEMICAL STRUCTURE</b>                                                         | Polydioxanone, synthetic, absorbable, monofilament surgical suture         |
| <b>COATING</b>                                                                    | -                                                                          |
| <b>WOUND SUPPORT</b>                                                              | ~ 60 days                                                                  |
| <b>ABSORPTION</b>                                                                 | ~ 180-210 days                                                             |
| <b>TENSILE STRENGTH</b>                                                           | 2 <sup>nd</sup> week ~ 75%<br>4 <sup>th</sup> week ~ 50%-60% wound support |
| <b>USP RANGE</b>                                                                  | 6/0 - 2                                                                    |
| <b>STERILIZATION</b>                                                              | EO (Ethylene Oxide)                                                        |
| <b>PACKAGING</b>                                                                  | In aluminium foil packages, with needle or without needle                  |



### HIGH AND LONG TERM TENSILE STRENGTH

Superior structure maintaining its tensile strength for long-term wound support



### SMOOTH MONOFILAMENT STRUCTURE AT MICROSCOPIC LEVEL

Minimum wound trauma  
Excellent surface to prevent bacterial adherence

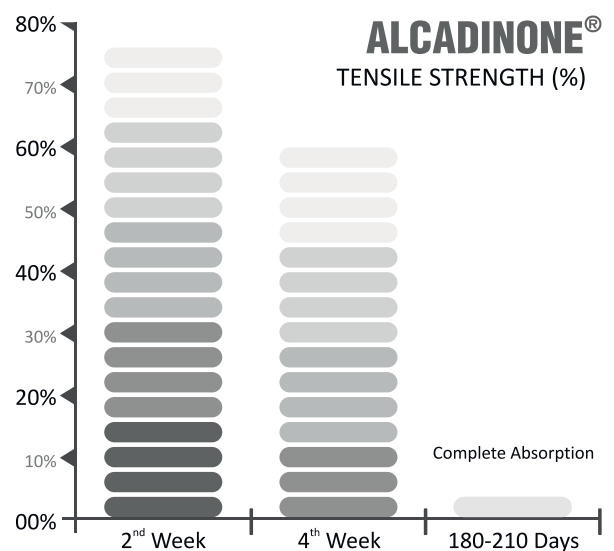


### ABSORPTION BY PROGRESSIVE HYDROLYSIS

Predictable absorption rate

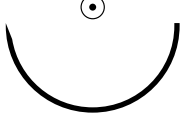
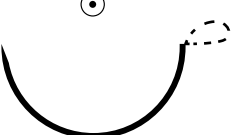
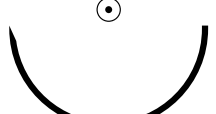
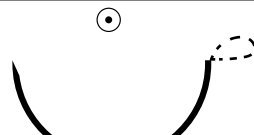
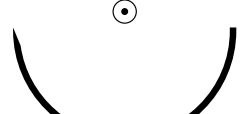
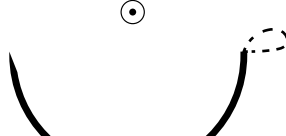
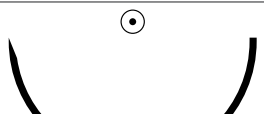
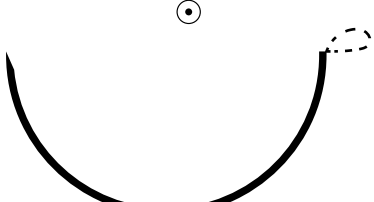
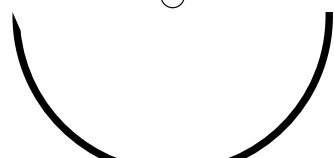
## AREAS OF USAGE

- Orthopedic Surgery (tendon, joint capsule)
- Soft Tissue Approximations
- General Surgery
- Dermatology
- Ligations
- Plastic Surgery
- Plastic Surgery
- Urology
- Abdominal Wall Closure

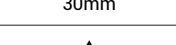
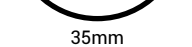


1/2 CIRCLE TAPER POINT

| NEEDLE<br>TYPE                                                                                   | SUTURE<br>LENGTH | COLOR  | USP                      |                          |                          |                          |                          |                          |
|--------------------------------------------------------------------------------------------------|------------------|--------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                                  |                  |        | 6/0                      | 5/0                      | 4/0                      | 3/0                      | 2/0                      | 0                        |
| <br>13mm        | 45cm<br>75cm     | violet | H0813Z1T45<br>H0813Z1T75 | H0713Z1T45<br>H0713Z1T75 |                          |                          |                          |                          |
| <br>16mm        | 75cm             | violet |                          | H0716Z1T75               | H0616Z1T75               | H0516Z1T75               |                          |                          |
| <br>16mm Double | 60cm<br>75cm     | violet |                          | H0716Z1F60<br>H0716Z1F75 | H0616Z1F60<br>H0616Z1F75 |                          |                          |                          |
| <br>17mm        | 75cm             | violet |                          |                          | H0617Z1T75               |                          |                          |                          |
| <br>20mm        | 75cm             | violet |                          |                          | H0620Z1T75               | H0520Z1T75               |                          |                          |
| <br>22mm       | 75cm             | violet |                          |                          |                          | H0522Z1T75               |                          |                          |
| <br>25mm      | 75cm             | violet |                          |                          | H0625Z1T75               | H0525Z1T75               | H0425Z1T75               |                          |
| <br>26mm      | 75cm<br>90cm     | violet |                          |                          | H0626Z1T75<br>H0626Z1T90 | H0526Z1T75<br>H0526Z1T90 | H0426Z1T75<br>H0426Z1T90 | H0326Z1T75<br>H0326Z1T90 |

| NEEDLE TYPE                                                                                      | SUTURE LENGTH              | COLOR  | USP                      |                          |                          |                          |                          |
|--------------------------------------------------------------------------------------------------|----------------------------|--------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                                  |                            |        | 3/0                      | 2/0                      | 0                        | 1                        | 2                        |
| <br>30mm        | 75cm<br>90cm               | violet | H0530Z1T75<br>H0530Z1T90 | H0430Z1T75<br>H0430Z1T90 | H0330Z1T75<br>H0330Z1T90 | H0230Z1T75<br>H0230Z1T90 |                          |
| <br>35mm        | 75cm                       | violet |                          | H0435Z1T75               | H0335Z1T75               | H0235Z1T75               |                          |
| <br>37mm loop   | 150cm                      | violet |                          |                          | H0337Z1P150              |                          |                          |
| <br>40mm        | 75cm<br>90cm               | violet |                          | H0440Z1T75               | H0340Z1T75<br>H0340Z1T90 | H0240Z1T75<br>H0240Z1T90 | H0140Z1T90               |
| <br>40mm loop   | 150cm                      | violet |                          |                          | H0340Z1P150              | H0240Z1P150              |                          |
| <br>45mm      | 75cm<br>90cm               | violet |                          |                          |                          | H0245Z1T75<br>H0245Z1T90 | H0145Z1T75<br>H0145Z1T90 |
| <br>48mm loop | 150cm                      | violet |                          |                          | H0348Z1P150              | H0248Z1P150              |                          |
| <br>50mm      | 75cm<br>90cm               | violet |                          |                          | H0350Z1T75<br>H0350Z1T90 | H0250Z1T75               | H0150Z1T75<br>H0150Z1T90 |
| <br>65mm loop  | 122cm (48")<br>150cm (60") | violet |                          |                          | H0365Z1P150              | H0265Z1P122              |                          |
| <br>65mm       | 122cm (48")<br>150cm (60") |        |                          |                          | H0365Z1T150              |                          |                          |

## 1/2 CIRCLE CUTTING EDGE

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR  | USP                      |                          |            |                          |                          |                          |            |
|---------------------------------------------------------------------------------------------|------------------|--------|--------------------------|--------------------------|------------|--------------------------|--------------------------|--------------------------|------------|
|                                                                                             |                  |        | 6/0                      | 5/0                      | 4/0        | 3/0                      | 2/0                      | 0                        | 1          |
| <br>13mm   | 45cm<br>75cm     | violet | H0813Z3T45<br>H0813Z3T75 | H0713Z3T45<br>H0713Z3T75 |            |                          |                          |                          |            |
| <br>16mm   | 75cm             | violet |                          | H0716Z3T75               | H0616Z3T75 |                          |                          |                          |            |
| <br>17mm   | 75cm             | violet |                          |                          | H0617Z3T75 |                          |                          |                          |            |
| <br>18mm   | 75cm             | violet |                          | H0718Z3T75               |            |                          |                          |                          |            |
| <br>26mm   | 75cm<br>90cm     | violet |                          |                          |            | H0526Z3T75<br>H0526Z3T90 | H0426Z3T75<br>H0426Z3T90 |                          |            |
| <br>30mm   | 75cm<br>90cm     | violet |                          |                          |            |                          | H0430Z3T75<br>H0430Z3T90 | H0330Z3T75<br>H0330Z3T90 |            |
| <br>35mm   | 75cm             | violet |                          |                          |            |                          | H0435Z3T75               |                          |            |
| <br>40mm | 75cm             | violet |                          |                          |            |                          |                          | H0340Z3T75               | H0240Z3T75 |

### 3/8 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                               | SUTURE LENGTH | COLOR  | USP        |            |            |                          |                          |
|-------------------------------------------------------------------------------------------|---------------|--------|------------|------------|------------|--------------------------|--------------------------|
|                                                                                           |               |        | 6/0        | 5/0        | 4/0        | 3/0                      | 2/0                      |
| <br>9mm  | 75cm          | violet | H0809V3T75 |            |            |                          |                          |
| <br>13mm | 75cm          | violet |            | H0713V3T75 |            |                          |                          |
| <br>16mm | 75cm          | violet |            | H0716V3T75 | H0616V3T75 | H0516V3T75               |                          |
| <br>20mm | 75cm          | violet |            |            | H0620V3T75 | H0520V3T75               |                          |
| <br>25mm | 75cm          | violet |            |            | H0625V3T75 |                          | H0425V3T75               |
| <br>26mm | 75cm<br>90cm  | violet |            |            |            | H0526V3T75<br>H0526V3T90 | H0426V3T75<br>H0426V3T90 |
| <br>30mm | 75cm          | violet |            |            |            |                          | H0430V3T75               |

### 3/8 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                        | SUTURE LENGTH | COLOR  | USP                      |                          |                          |                          |                          |
|----------------------------------------------------------------------------------------------------|---------------|--------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                                    |               |        | 6/0                      | 5/0                      | 4/0                      | 3/0                      | 2/0                      |
| <br>9mm         | 75cm<br>90cm  | violet | H0809V1T75<br>H0809V1T90 |                          |                          |                          |                          |
| <br>13mm        | 75cm          | violet |                          | H0713V1T75               |                          |                          |                          |
| <br>13mm Double | 60cm<br>75cm  | violet | H0813V1F60<br>H0813V1F75 |                          |                          |                          |                          |
| <br>16mm        | 60cm<br>75cm  | violet |                          | H0716V1T60<br>H0716V1T75 | H0616V1T60<br>H0616V1T75 |                          |                          |
| <br>26mm        | 75cm<br>90cm  | violet |                          |                          |                          | H0526V1T75<br>H0526V1T90 | H0426V1T75<br>H0426V1T90 |





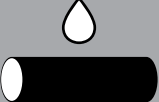
**ALCALENE®**

Minimum memory,  
smooth surface,  
excellent ease of use

## PP - Polypropylene

ALCALENE® sutures are synthetic non- absorbable sterile surgical sutures which are composed of isotactic crystallize polypropylene polymer of high molecular weight. Suture is pigmented blue to enhance visibility.

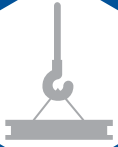
ALCALENE® sutures have been presented in USP 6/0 – USP 2 gauge sizes in a variety of lengths from 10 cm to 150 cm, as non-needled or attached to stainless steel needles of varying types and sizes.

|                                                                                   |                                                   |
|-----------------------------------------------------------------------------------|---------------------------------------------------|
|  | Non-absorbable, monofilament, blue                |
| <b>CHEMICAL STRUCTURE</b>                                                         | Polypropylene                                     |
| <b>COATING</b>                                                                    | -                                                 |
| <b>WOUND SUPPORT</b>                                                              | Loss over years                                   |
| <b>ABSORPTION</b>                                                                 | -                                                 |
| <b>TENSILE STRENGTH</b>                                                           | -                                                 |
| <b>USP RANGE</b>                                                                  | 6/0 - 2                                           |
| <b>STERILIZATION</b>                                                              | EO (Ethylene Oxide)                               |
| <b>PACKAGING</b>                                                                  | In sterile packages with needle or without needle |



### HIGH TENSILE STRENGTH

Permanent wound support



### FLEXIBILITY AND SOFTNESS

Excellent ease of use  
Easy and safety knot tying



### HIGH FATIGUE STRENGTH AGAINST MULTI-BENDING

Use in Cardiovascular Surgery  
(cardiac prothesis [artificial heart] or  
vascular anastomosis)



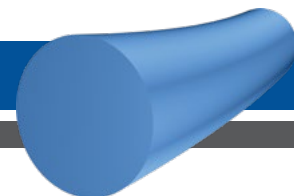
### SMOOTH MONOFILAMENT STRUCTURE AT THE MICROSCOPIC LEVEL

Smooth penetration through the tissue without  
tissue cutting, friction, and trauma  
Minimum wound trauma  
Excellent surface to prevent bacterial adherence



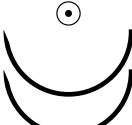
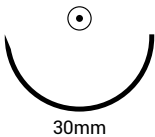
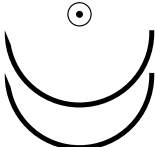
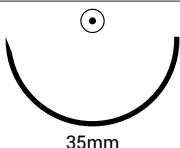
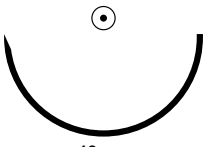
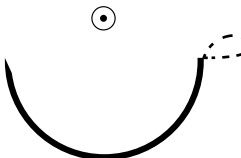
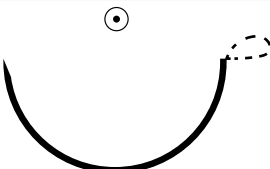
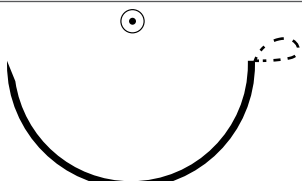
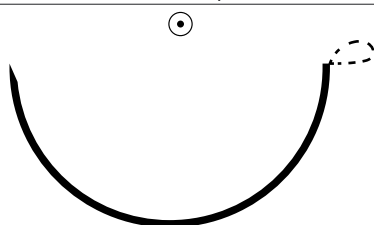
## AREAS OF USAGE

- Orthopedic Surgery
- Plastic and Reconstructive Surgery
- Skin Closures
- Microsurgery
- Gastrointestinal Surgery
- General Soft Tissue Approximation and/or Ligation
- Gynecology
- Hernia



## 1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                        | SUTURE LENGTH        | COLOR | USP                      |                                        |                          |                          |            |
|----------------------------------------------------------------------------------------------------|----------------------|-------|--------------------------|----------------------------------------|--------------------------|--------------------------|------------|
|                                                                                                    |                      |       | 6/0                      | 5/0                                    | 4/0                      | 3/0                      | 2/0        |
| <br>9mm Double    | 45cm<br>75cm         | blue  | F0809Z1F75               |                                        |                          |                          |            |
| <br>10mm Double   | 45cm<br>75cm         | blue  | F0810Z1F45<br>F0810Z1F75 |                                        |                          |                          |            |
| <br>13mm Double   | 45cm<br>75cm<br>90cm | blue  | F0813Z1F45<br>F0813Z1F75 | F0713Z1F45<br>F0713Z1F75<br>F0713Z1F90 |                          |                          |            |
| <br>16mm          | 45cm<br>75cm         | blue  | F0816Z1T45<br>F0816Z1T75 | F0716Z1T45<br>F0716Z1T75               | F0616Z1T45<br>F0616Z1T75 | F0516Z1T45<br>F0516Z1T75 |            |
| <br>16mm Double   | 45cm<br>90cm         | blue  | F0816Z1F45<br>F0816Z1F90 | F0716Z1F45<br>F0716Z1F90               | F0616Z1F45<br>F0616Z1F90 |                          |            |
| <br>17mm Double   | 45cm<br>75cm         | blue  |                          |                                        | F0617Z1F75               |                          |            |
| <br>18mm        | 75cm                 | blue  |                          |                                        | F0618Z1T75               | F0518Z1T75               |            |
| <br>20mm        | 75cm                 | blue  |                          | F0720Z1T75                             | F0620Z1T75               | F0520Z1T75               | F0420Z1T75 |
| <br>20mm Double | 75cm                 | blue  |                          | F0720Z1F75                             | F0620Z1F75               | F0520Z1F75               |            |
| <br>22mm        | 75cm                 | blue  |                          |                                        |                          | F0522Z1T75               |            |
| <br>22mm Double | 75cm                 | blue  |                          | F0722Z1F75                             | F0622Z1F75               |                          |            |
| <br>25mm        | 75cm                 | blue  |                          |                                        |                          |                          | F0425Z1T75 |

| NEEDLE<br>TYPE                                                                                   | SUTURE<br>LENGTH | COLOR | USP                      |                          |                          |                          |                          |                          |
|--------------------------------------------------------------------------------------------------|------------------|-------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                                  |                  |       | 4/0                      | 3/0                      | 2/0                      | 0                        | 1                        | 2                        |
| <br>25mm Double | 75cm             | blue  |                          | F0525Z1F75               | F0425Z1F75               |                          |                          |                          |
| <br>26mm        | 75cm             | blue  | F0626Z1T75               | F0526Z1T75               | F0426Z1T75               |                          |                          |                          |
| <br>26mm Double | 75cm<br>90cm     | blue  | F0626Z1F75<br>F0626Z1F90 | F0526Z1F75<br>F0526Z1F90 | F0426Z1F75<br>F0426Z1F90 |                          |                          |                          |
| <br>30mm        | 75cm<br>90cm     | blue  |                          |                          |                          | F0330Z1T75               |                          |                          |
| <br>30mm Double | 75cm<br>90cm     | blue  |                          | F0530Z1F75<br>F0530Z1F90 | F0430Z1F75<br>F0430Z1F90 | F0330Z1F75<br>F0330Z1F90 | F0230Z1F75<br>F0230Z1F90 |                          |
| <br>35mm       | 75cm             | blue  |                          | F0535Z1T75               | F0435Z1T75               | F0335Z1T75               |                          |                          |
| <br>40mm      | 75cm<br>90cm     | blue  |                          |                          | F0440Z1T75<br>F0440Z1T90 | F0340Z1T75               | F0240Z1T75<br>F0240Z1T90 | F0140Z1T75<br>F0140Z1T90 |
| <br>40mm loop | 150cm            | blue  |                          |                          |                          | F0340Z1P150              |                          |                          |
| <br>45mm loop | 150cm            | blue  |                          |                          |                          |                          | F0245Z1P150              |                          |
| <br>50mm loop | 150cm            | blue  |                          |                          |                          | F0350Z1P150              | F0250Z1P150              |                          |
| <br>65mm loop  | 150cm            | blue  |                          |                          |                          |                          | F0265Z1P150              |                          |

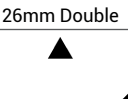
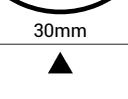
## 1/2 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                                | SUTURE LENGTH | COLOR | USP        |            |                          |                          |                          |                          |                          |
|--------------------------------------------------------------------------------------------|---------------|-------|------------|------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                            |               |       | 6/0        | 5/0        | 4/0                      | 3/0                      | 2/0                      | 0                        | 1                        |
| <br>9mm   | 75cm          | blue  | F0809Z3T75 |            |                          |                          |                          |                          |                          |
| <br>13mm  | 75cm          | blue  | F0813Z3T75 | F0713Z3T75 |                          |                          |                          |                          |                          |
| <br>16mm  | 45cm<br>75cm  | blue  | F0816Z3T75 | F0716Z3T75 | F0616Z3T45<br>F0616Z3T75 |                          |                          |                          |                          |
| <br>17mm  | 75cm          | blue  |            |            | F0617Z3T75               |                          |                          |                          |                          |
| <br>20mm  | 75cm          | blue  |            |            |                          | F0520Z3T75               | F0420Z3T75               |                          |                          |
| <br>25mm  | 75cm          | blue  |            |            |                          | F0525Z3T75               | F0425Z3T75               |                          |                          |
| <br>26mm  | 75cm<br>90cm  | blue  |            |            |                          | F0526Z3T75<br>F0526Z3T90 | F0426Z3T75<br>F0426Z3T90 | F0326Z3T75<br>F0326Z3T90 |                          |
| <br>30mm  | 75cm          | blue  |            |            |                          | F0530Z3T75               | F0430Z3T75               | F0330Z3T75               |                          |
| <br>35mm  | 75cm          | blue  |            |            |                          |                          |                          | F0335Z3T75               | F0235Z3T75               |
| <br>40mm | 75cm<br>90cm  | blue  |            |            |                          |                          | F0440Z3T75<br>F0440Z3T90 | F0340Z3T75<br>F0340Z3T90 | F0240Z3T75<br>F0240Z3T90 |

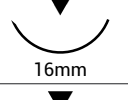
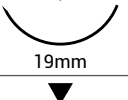
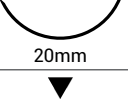
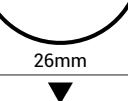
## 3/8 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                                        | SUTURE LENGTH | COLOR | USP                      |                          |            |            |
|----------------------------------------------------------------------------------------------------|---------------|-------|--------------------------|--------------------------|------------|------------|
|                                                                                                    |               |       | 6/0                      | 5/0                      | 4/0        | 3/0        |
| <br>10mm        | 60cm<br>75cm  | blue  | F0810V3T60<br>F0810V3T75 |                          |            |            |
| <br>13mm        | 60cm<br>75cm  | blue  | F0813V3T60<br>F0813V3T75 | F0713V3T60<br>F0713V3T75 |            |            |
| <br>13mm Double | 60cm<br>75cm  | blue  | F0813V3F60<br>F0813V3F75 | F0713V3F60<br>F0713V3F75 |            |            |
| <br>16mm        | 75cm          | blue  | F0816V3T75               | F0716V3T75               | F0616V3T75 | F0516V3T75 |
| <br>18mm        | 75cm          | blue  |                          | F0718V3T75               | F0618V3T75 |            |

### 3/8 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                                      | SUTURE LENGTH | COLOR | USP        |                          |                          |                          |                          |                          |
|--------------------------------------------------------------------------------------------------|---------------|-------|------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                                                                                  |               |       | 5/0        | 4/0                      | 3/0                      | 2/0                      | 0                        | 1                        |
| <br>20mm        | 75cm          | blue  | F0720V3T75 | F0620V3T75               | F0520V3T75               |                          |                          |                          |
| <br>22mm        | 75cm          | blue  |            |                          | F0522V3T75               |                          |                          |                          |
| <br>26mm        | 75cm<br>90cm  | blue  |            | F0626V3T75<br>F0626V3T90 | F0526V3T75<br>F0526V3T90 | F0426V3T75<br>F0426V3T90 |                          |                          |
| <br>26mm Double | 75cm<br>90cm  | blue  |            |                          | F0526V3F75<br>F0526V3F90 | F0426V3F75<br>F0426V3F90 |                          |                          |
| <br>30mm        | 75cm<br>90cm  | blue  |            |                          | F0530V3T75<br>F0530V3T90 | F0430V3T75<br>F0430V3T90 | F0330V3T75<br>F0330V3T90 | F0230V3T75<br>F0230V3T90 |
| <br>40mm        | 75cm<br>90cm  | blue  |            |                          |                          |                          | F0340V3T75<br>F0340V3T90 | F0240V3T75<br>F0240V3T90 |

### 3/8 CIRCLE REVERSE CUTTING EDGE

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR | USP                      |                          |                          |                          |                          |                          |            |
|---------------------------------------------------------------------------------------------|---------------|-------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------|
|                                                                                             |               |       | 6/0                      | 5/0                      | 4/0                      | 3/0                      | 2/0                      | 0                        | 1          |
| <br>16mm | 45cm<br>60cm  | blue  | F0816V4T45<br>F0816V4T60 | F0716V4T45<br>F0716V4T60 | F0616V4T45<br>F0616V4T60 | F0516V4T45<br>F0516V4T60 |                          |                          |            |
| <br>19mm | 75cm          | blue  |                          | F0719V4T75               | F0619V4T75               | F0519V4T75               |                          |                          |            |
| <br>20mm | 75cm          | blue  |                          | F0720V4T75               | F0620V4T75               | F0520V4T75               |                          |                          |            |
| <br>26mm | 75cm<br>90cm  | blue  |                          |                          |                          | F0526V4T75<br>F0526V4T90 | F0426V4T75<br>F0426V4T90 |                          |            |
| <br>30mm | 75cm<br>90cm  | blue  |                          |                          |                          | F0530V4T75<br>F0530V4T90 | F0430V4T75<br>F0430V4T90 | F0330V4T75<br>F0330V4T90 |            |
| <br>35mm | 75cm<br>90cm  | blue  |                          |                          |                          | F0535V4T75<br>F0535V4T90 | F0435V4T75<br>F0435V4T90 |                          |            |
| <br>40mm | 75cm          | blue  |                          |                          |                          |                          | F0440V4T75               | F0340V4T75               | F0240V4T75 |

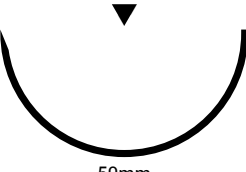
### 3/8 CIRCLE SPATULA

| NEEDLE<br>TYPE                                                                                  | SUTURE<br>LENGTH | COLOR | USP        |
|-------------------------------------------------------------------------------------------------|------------------|-------|------------|
|                                                                                                 |                  |       | 6/0        |
| <br>8mm Double | 45cm             | blue  | F0808V7F45 |
|                                                                                                 | 60cm             |       | F0808V7F60 |

### STRAIGHT CUTTING

| NEEDLE<br>TYPE                                                                            | SUTURE<br>LENGTH | COLOR | USP        |            |
|-------------------------------------------------------------------------------------------|------------------|-------|------------|------------|
|                                                                                           |                  |       | 3/0        | 2/0        |
| <br>60mm | 90cm             | blue  | F0560S3T90 | F0460S3T90 |

### 1/2 CIRCLE REVERSE CUTTING EDGE

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR | USP        |            |                          |                          |
|---------------------------------------------------------------------------------------------|------------------|-------|------------|------------|--------------------------|--------------------------|
|                                                                                             |                  |       | 2/0        | 0          | 1                        | 2                        |
| <br>30mm   | 75cm             | blue  | F0430Z4T75 | F0330Z4T75 |                          |                          |
| <br>40mm  | 75cm             | blue  |            | F0340Z4T75 | F0240Z4T75               |                          |
| <br>50mm | 75cm<br>90cm     | blue  |            |            | F0250Z4T75<br>F0250Z4T90 | F0150Z4T75<br>F0150Z4T90 |

## 3/8 CIRCLE TAPER POINT

| NEEDLE<br>TYPE                                                                                   | SUTURE<br>LENGTH | COLOR | USP                      |                          |            |
|--------------------------------------------------------------------------------------------------|------------------|-------|--------------------------|--------------------------|------------|
|                                                                                                  |                  |       | 6/0                      | 5/0                      | 4/0        |
| <br>8mm Double  | 45cm<br>60cm     | blue  | F0808V1F45<br>F0808V1F60 |                          |            |
| <br>10mm        | 60cm<br>75cm     | blue  | F0810V1T60<br>F0810V1T75 |                          |            |
| <br>13mm        | 60cm<br>75cm     | blue  | F0813V1T60<br>F0813V1T75 | F0713V1T60<br>F0713V1T75 |            |
| <br>13mm Double | 60cm<br>75cm     | blue  | F0813V1F60<br>F0813V1F75 |                          |            |
| <br>16mm        | 75cm             | blue  |                          | F0716V1T75               | F0616V1T75 |





**ALCAMIDE®**

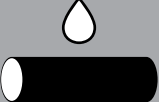
Optimum flexibility,  
esthetic result and confidence

## PA - Polyamide

ALCAMIDE® sutures are synthetic non-absorbable sterile surgical sutures which are composed of the chain aliphatic polymers Polyamide 6 or 6,6. ALCAMIDE® suture is pigmented blue to enhance visibility.

ALCAMIDE® sutures has been presented in USP 6/0 – USP 2 gauge sizes in a variety of lengths from 10 cm to 150 cm, as non-needed or attached to stainless steel needles of varying types and sizes.

ALCAMIDE®

|                                                                                   |                                                   |
|-----------------------------------------------------------------------------------|---------------------------------------------------|
|  | Non-absorbable, monofilament, blue                |
| CHEMICAL STRUCTURE                                                                | Polyamide                                         |
| COATING                                                                           | -                                                 |
| WOUND SUPPORT                                                                     | Loss over years                                   |
| ABSORPTION                                                                        | -                                                 |
| TENSILE STRENGTH                                                                  | -                                                 |
| USP RANGE                                                                         | 6/0 - 2                                           |
| STERILIZATION                                                                     | EO (Ethylene Oxide)                               |
| PACKAGING                                                                         | In sterile packages with needle or without needle |





### HIGH TENSILE STRENGTH, NON-ABSORBABLE STRUCTURE

Permanent wound support

### FLEXIBILITY AND SOFTNESS

Excellent ease of use  
Easy and safety knot tying

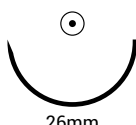
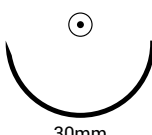
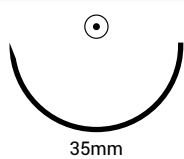
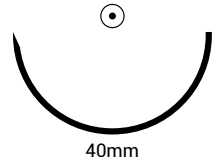
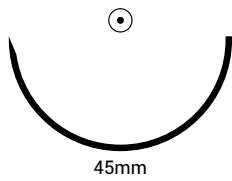
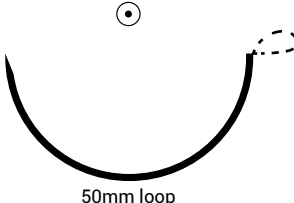
### SMOOTH MONOFILAMENT STRUCTURE AT THE MICROSCOPIC LEVEL

Smooth penetration through the tissue  
without tissue cutting, friction, and trauma  
Minimum wound trauma  
Excellent surface to prevent bacterial  
adherence

## AREAS OF USAGE

- Plastic and Reconstructive Surgery
- General Soft Tissue Approximation and/or Ligation
- Microsurgery
- Intracutaneous and Subcutaneous Skin Closures
- Ligations
- General Surgery
- Gastrointestinal Surgery
- Gynecology
- Orthopedic Surgery

## 1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                      | SUTURE LENGTH | COLOR | USP        |                          |                          |                          |
|--------------------------------------------------------------------------------------------------|---------------|-------|------------|--------------------------|--------------------------|--------------------------|
|                                                                                                  |               |       | 3/0        | 2/0                      | 0                        | 1                        |
| <br>26mm        | 75cm<br>90cm  | blue  | K0526Z1T75 | K0426Z1T75<br>K0426Z1T90 |                          |                          |
| <br>30mm        | 75cm          | blue  |            | K0430Z1T75               | K0330Z1T75               | K0230Z1T75               |
| <br>35mm        | 75cm          | blue  |            |                          | K0335Z1T75               | K0235Z1T75               |
| <br>40mm        | 75cm          | blue  |            | K0440Z1T75               | K0340Z1T75               | K0240Z1T75               |
| <br>45mm      | 75cm<br>90cm  | blue  |            |                          | K0345Z1T75<br>K0345Z1T90 | K0245Z1T75<br>K0245Z1T90 |
| <br>50mm loop | 150cm         | blue  |            |                          | K0350Z1P150              | K0250Z1P150              |

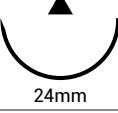
## 1/2 CIRCLE REVERSE CUTTING EDGE

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR | USP |                          |                          |
|---------------------------------------------------------------------------------------------|---------------|-------|-----|--------------------------|--------------------------|
|                                                                                             |               |       | 2/0 | 0                        | 1                        |
| <br>40mm | 75cm<br>90cm  | blue  |     | K0340Z4T75<br>K0340Z4T90 | K0240Z4T75<br>K0240Z4T90 |

## 1/4 CIRCLE SPATULA

| NEEDLE TYPE                                                                                       | SUTURE LENGTH | COLOR | USP        |  |  |
|---------------------------------------------------------------------------------------------------|---------------|-------|------------|--|--|
|                                                                                                   |               |       | 6/0        |  |  |
| <br>8mm Double | 45cm          | blue  | K0808R7F45 |  |  |

## 1/2 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                                | SUTURE LENGTH | COLOR | USP        |            |                          |                          |            |            |
|--------------------------------------------------------------------------------------------|---------------|-------|------------|------------|--------------------------|--------------------------|------------|------------|
|                                                                                            |               |       | 5/0        | 4/0        | 3/0                      | 2/0                      | 0          | 1          |
| <br>17mm  | 75cm          | blue  | K0717Z3T75 |            |                          |                          |            |            |
| <br>22mm  | 45cm          | blue  | K0722Z3T45 |            |                          |                          |            |            |
| <br>24mm  | 75cm          | blue  |            | K0624Z3T75 |                          |                          |            |            |
| <br>26mm  | 75cm<br>90cm  | blue  |            |            | K0526Z3T75<br>K0526Z3T90 |                          |            |            |
| <br>30mm  | 75cm<br>90cm  | blue  |            |            |                          | K0430Z3T75<br>K0430Z3T90 | K0330Z3T75 |            |
| <br>35mm  | 75cm          | blue  |            |            |                          |                          | K0335Z3T75 |            |
| <br>37mm | 75cm          | blue  |            |            |                          |                          |            | K0237Z3T75 |

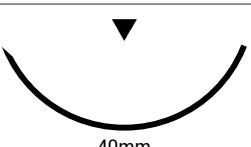
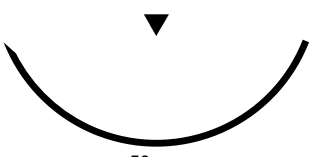
## 3/8 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR | USP                      |            |            |            |
|---------------------------------------------------------------------------------------------|---------------|-------|--------------------------|------------|------------|------------|
|                                                                                             |               |       | 6/0                      | 5/0        | 4/0        | 3/0        |
| <br>10mm | 45cm          | blue  | K0810V3T45               |            |            |            |
| <br>13mm | 60cm          | blue  | K0813V3T60               |            |            |            |
| <br>16mm | 45cm<br>60cm  | blue  | K0816V3T45<br>K0816V3T60 | K0716V3T45 |            |            |
| <br>17mm | 75cm          | blue  |                          | K0717V3T75 |            |            |
| <br>20mm | 75cm          | blue  |                          |            | K0620V3T75 | K0520V3T75 |
| <br>22mm | 75cm          | blue  |                          | K0722V3T75 |            |            |
| <br>25mm | 75cm          | blue  |                          |            | K0625V3T75 | K0525V3T75 |
| <br>26mm | 75cm          | blue  |                          |            |            | K0526V3T75 |
| <br>30mm | 75cm          | blue  |                          |            | K0630V3T75 | K0530V3T75 |

### 3/8 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                               | SUTURE LENGTH | COLOR | USP        |            |            |            |
|-------------------------------------------------------------------------------------------|---------------|-------|------------|------------|------------|------------|
|                                                                                           |               |       | 2/0        | 0          | 1          | 2          |
| <br>30mm | 75cm          | blue  | K0430V3T75 | K0330V3T75 |            |            |
| <br>35mm | 75cm          | blue  | K0435V3T75 |            |            |            |
| <br>40mm | 75cm          | blue  | K0440V3T75 | K0340V3T75 | K0240V3T75 | K0140V3T75 |

### 3/8 CIRCLE REVERSE CUTTING EDGE

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR | USP        |            |            |                          |                          |            |            |            |
|---------------------------------------------------------------------------------------------|---------------|-------|------------|------------|------------|--------------------------|--------------------------|------------|------------|------------|
|                                                                                             |               |       | 6/0        | 5/0        | 4/0        | 3/0                      | 2/0                      | 0          | 1          | 2          |
| <br>13mm   | 75cm          | blue  | K0813V4T75 | K0713V4T75 |            |                          |                          |            |            |            |
| <br>16mm   | 75cm          | blue  | K0816V4T75 | K0716V4T75 | K0616V4T75 | K0516V4T75               |                          |            |            |            |
| <br>20mm | 75cm          | blue  |            |            | K0620V4T75 | K0520V4T75               |                          |            |            |            |
| <br>26mm | 75cm<br>90cm  | blue  |            |            |            | K0526V4T75<br>K0526V4T90 | K0426V4T75<br>K0426V4T90 |            |            |            |
| <br>30mm | 75cm<br>90cm  | blue  |            |            |            | K0530V4T75<br>K0530V4T90 | K0430V4T75<br>K0430V4T90 |            |            |            |
| <br>40mm |               |       |            |            |            |                          | K0440V4T75               | K0340V4T75 | K0240V4T75 |            |
| <br>50mm  |               |       |            |            |            |                          |                          |            | K0250V4T75 | K0150V4T75 |

### 3/8 CIRCLE SPATULA

| NEEDLE<br>TYPE                                                                                  | SUTURE<br>LENGTH | COLOR | USP        |
|-------------------------------------------------------------------------------------------------|------------------|-------|------------|
|                                                                                                 |                  |       | 6/0        |
| <br>8mm Double | 30cm             | blue  | K0808V7F30 |
|                                                                                                 | 45cm             |       | K0808V7F45 |

### STRAIGHT CUTTING

| NEEDLE<br>TYPE                                                                            | SUTURE<br>LENGTH | COLOR | USP        |            |
|-------------------------------------------------------------------------------------------|------------------|-------|------------|------------|
|                                                                                           |                  |       | 3/0        | 2/0        |
| <br>60mm | 75cm             | blue  | K0560S3T75 | K0460S3T75 |
|                                                                                           | 90cm             |       | K0560S3T90 | K0460S3T90 |



**ALCASILK®**

Natural solution in  
tissue approximation

## SILK

ALCASILK® sutures are non-absorbable sterile surgical sutures which are produced of an organic protein called fibroin. This organic protein is derived from the domesticated species Bombyx mori of the family Bombyciade. Braided ALCASILK® sutures are processed to remove the natural oil and viscous. ALCASILK® sutures are dyed black and coated wax.

ALCASILK® sutures have been presented in USP 6/0 – USP 2 gauge sizes in a variety of lengths from 10 cm to 150 cm , as non-needed or attached to stainless steel needles of varying types and sizes.

ALCASILK®



Non-absorbable, multifilament, black

### CHEMICAL STRUCTURE

Silk

### COATING

Wax

### WOUND SUPPORT

Loss over years

### ABSORPTION

-

### TENSILE STRENGTH

-

### USP RANGE

6/0 - 2

### STERILIZATION

EO (Ethylene Oxide)

### PACKAGING

In sterile packages with needle or without needle



### HIGH TENSILE STRENGTH, NON-ABSORBABLE STRUCTURE

Excellent and permanent wound support  
up to three months



### COATED MULTIFILAMENT

Smooth penetration through the tissue  
without tissue cutting, friction,  
and trauma  
Minimum wound trauma  
Lower capillarity



### BRAIDED STRUCTURE

Minimum suture memory  
High usage characteristic  
Flexibility  
High tensile strength  
Excellent knot safety

## AREAS OF USAGE

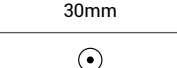
- Oral Surgery
- General Soft Tissue Approximation and/or Ligation
- Ligations
- General Surgery
- Gastrointestinal Surgery
- Gynecology



## 1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                               | SUTURE LENGTH | COLOR | USP                      |                          |            |            |                          |                          |
|-------------------------------------------------------------------------------------------|---------------|-------|--------------------------|--------------------------|------------|------------|--------------------------|--------------------------|
|                                                                                           |               |       | 6/0                      | 5/0                      | 4/0        | 3/0        | 2/0                      | 0                        |
| <br>16mm | 45cm<br>75cm  | black | E0816Z1T45<br>E0816Z1T75 | E0716Z1T45<br>E0716Z1T75 | E0616Z1T75 | E0516Z1T75 |                          |                          |
| <br>18mm | 75cm          | black |                          | E0718Z1T75               | E0618Z1T75 | E0518Z1T75 |                          |                          |
| <br>20mm | 75cm          | black |                          | E0720Z1T75               | E0620Z1T75 | E0520Z1T75 | E0420Z1T75               |                          |
| <br>25mm | 75cm<br>90cm  | black |                          |                          |            |            | E0425Z1T75               |                          |
| <br>26mm | 75cm<br>90cm  | black |                          |                          | E0626Z1T75 | E0526Z1T75 | E0426Z1T75<br>E0426Z1T90 | E0326Z1T75<br>E0326Z1T90 |

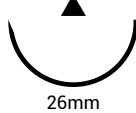
## 1/2 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR | USP        |            |            |                          |
|---------------------------------------------------------------------------------------------|---------------|-------|------------|------------|------------|--------------------------|
|                                                                                             |               |       | 2/0        | 0          | 1          | 2                        |
| <br>30mm | 75cm          | black | E0430Z1T75 | E0330Z1T75 | E0230Z1T75 |                          |
| <br>35mm | 75cm          | black | E0435Z1T75 | E0335Z1T75 | E0235Z1T75 |                          |
| <br>37mm | 75cm          | black |            | E0337Z1T75 | E0237Z1T75 |                          |
| <br>40mm | 75cm          | black | E0440Z1T75 | E0340Z1T75 | E0240Z1T75 | E0140Z1T75               |
| <br>45mm | 75cm<br>90cm  | black |            |            |            | E0145Z1T75<br>E0145Z1T90 |

# 1/4 CIRCLE SPATULA

| NEEDLE<br>TYPE                                                                                  | SUTURE<br>LENGTH | COLOR | USP        |            |
|-------------------------------------------------------------------------------------------------|------------------|-------|------------|------------|
|                                                                                                 |                  |       | 6/0        | 5/0        |
| <br>8mm Double | 45cm             | black | E0808R7F45 | E0708R7F45 |

# 1/2 CIRCLE CUTTING EDGE

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR | USP        |                          |                          |            |
|---------------------------------------------------------------------------------------------|------------------|-------|------------|--------------------------|--------------------------|------------|
|                                                                                             |                  |       | 4/0        | 3/0                      | 2/0                      | 0          |
| <br>20mm   | 75cm             | black | E0620Z3T75 |                          |                          |            |
| <br>22mm   | 75cm             | black | E0622Z3T75 | E0522Z3T75               | E0422Z3T75               |            |
| <br>26mm   | 75cm<br>90cm     | black |            | E0526Z3T75<br>E0526Z3T90 | E0426Z3T75<br>E0426Z3T90 |            |
| <br>30mm  | 75cm             | black |            |                          | E0430Z3T75               | E0330Z3T75 |
| <br>36mm | 75cm             | black |            |                          | E0436Z3T75               | E0336Z3T75 |

# 1/2 CIRCLE REVERSE CUTTING EDGE

| NEEDLE<br>TYPE                                                                              | SUTURE<br>LENGTH | COLOR | USP        |            |            |
|---------------------------------------------------------------------------------------------|------------------|-------|------------|------------|------------|
|                                                                                             |                  |       | 4/0        | 3/0        | 2/0        |
| <br>30mm | 75cm             | black | E0630Z4T75 | E0530Z4T75 | E0430Z4T75 |
| <br>37mm | 75cm             | black |            | E0537Z4T75 | E0437Z4T75 |
| <br>40mm | 75cm             | black |            |            | E0440Z4T75 |

### 3/8 CIRCLE TAPER POINT

| NEEDLE TYPE                                                                               | SUTURE LENGTH | COLOR | USP        |
|-------------------------------------------------------------------------------------------|---------------|-------|------------|
|                                                                                           |               |       | 6/0        |
| <br>13mm | 75cm          | black | E0813V1T75 |

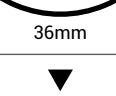
### 3/8 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                               | SUTURE LENGTH | COLOR | USP        |            |            |            |            |
|-------------------------------------------------------------------------------------------|---------------|-------|------------|------------|------------|------------|------------|
|                                                                                           |               |       | 6/0        | 5/0        | 4/0        | 3/0        | 2/0        |
| <br>13mm | 60cm          | black | E0813V3T60 |            |            |            |            |
| <br>16mm | 45cm          | black | E0816V3T45 | E0716V3T45 | E0616V3T45 |            |            |
| <br>20mm | 75cm          | black |            | E0720V3T75 | E0620V3T75 | E0520V3T75 | E0420V3T75 |
| <br>24mm | 75cm          | black |            |            |            | E0524V3T75 | E0424V3T75 |

### 3/8 CIRCLE CUTTING EDGE

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR | USP        |            |            |            |            |
|---------------------------------------------------------------------------------------------|---------------|-------|------------|------------|------------|------------|------------|
|                                                                                             |               |       | 4/0        | 3/0        | 2/0        | 0          | 1          |
| <br>25mm | 75cm          | black | E0625V3T75 | E0525V3T75 | E0425V3T75 |            |            |
| <br>30mm | 75cm          | black |            | E0530V3T75 | E0430V3T75 | E0330V3T75 |            |
| <br>35mm | 75cm          | black |            |            |            |            | E0235V3T75 |
| <br>40mm | 75cm          | black |            |            |            | E0340V3T75 | E0240V3T75 |

### 3/8 CIRCLE REVERSE CUTTING EDGE

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR | USP        |            |            |            |            |            |
|---------------------------------------------------------------------------------------------|---------------|-------|------------|------------|------------|------------|------------|------------|
|                                                                                             |               |       | 5/0        | 4/0        | 3/0        | 2/0        | 0          | 1          |
| <br>18mm   | 75cm          | black |            |            | E0518V4T75 |            |            |            |
| <br>20mm   | 75cm          | black | E0720V4T75 | E0620V4T75 | E0520V4T75 | E0420V4T75 |            |            |
| <br>22mm   | 75cm          | black |            |            | E0522V4T75 |            |            |            |
| <br>24mm   | 75cm          | black |            |            | E0524V4T75 | E0424V4T75 |            |            |
| <br>26mm   | 75cm          | black |            | E0626V4T75 | E0526V4T75 | E0426V4T75 | E0326V4T75 |            |
| <br>30mm   | 75cm          | black |            |            | E0530V4T75 | E0430V4T75 | E0330V4T75 |            |
| <br>36mm  | 75cm          | black |            |            | E0536V4T75 | E0436V4T75 |            |            |
| <br>40mm | 75cm          | black |            |            |            |            | E0340V4T75 | E0240V4T75 |

### STRAIGHT CUTTING

| NEEDLE TYPE                                                                                 | SUTURE LENGTH | COLOR | USP        |            |
|---------------------------------------------------------------------------------------------|---------------|-------|------------|------------|
|                                                                                             |               |       | 3/0        | 2/0        |
| <br>60mm | 75cm          | black | E0560S3T75 | E0460S3T75 |
|                                                                                             | 90cm          |       | E0560S3T90 | E0460S3T90 |
| <br>50mm | 75cm          | black | E0550S3T75 | E0450S3T75 |
|                                                                                             | 90cm          |       | E0550S3T90 | E0450S3T90 |

# SUTURES WITHOUT NEEDLE

| USP | 75cm     | 150cm    | 250cm    | 2x70cm   | 5x70cm   | 6x45cm   | 12x45cm  | 10x50cm  | 17x45cm  |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 5/0 |          | E07x1501 | E07X2501 | E07X7002 | E07X7005 | E07X4506 | E07X4512 | E07X5010 | E07X4517 |
| 4/0 |          | E06X1501 | E06X2501 | E06X7002 | E06X7005 | E06X4506 | E06X4512 | E06X5010 | E06X4517 |
| 3/0 |          | E05X1501 | E05X2501 | E05X7002 | E05X7005 | E05X4506 | E05X4512 | E05X5010 | E05X4517 |
| 2/0 | E04X7501 | E04X1501 | E04X2501 | E04X7002 | E04X7005 | E04X4506 | E04X4512 |          |          |
| 0   |          | E03X1501 | E03X2501 | E03X7002 | E03X7005 | E03X4506 |          |          |          |
| 1   |          | E02X1501 | E02X2501 | E02X7002 | E02X7005 | E02X4506 |          |          |          |

design & visual content

*erdem uyulaş*

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KATSAN KATGUT SANAYI ve TICARET A.S.

T. +90(232) 486 1185 - +90(232) 486 0910 | F. +90(232) 486 3379  
AOSB 10041 Sk. No:22 Cigli, IZMIR, TURKEY  
info@katsanas.com

**PRODUCT SHEET**

To whom it may concern:

We hereby KATSAN KATGÜT SAN. VE TİC. A.Ş. located at AOSB 10041 sok. No:22 Cigli Izmir/ Turkey, declare that below listed products are presented in our product range.

| STOCK CODE  | PRODUCT DESCRIPTION                       |
|-------------|-------------------------------------------|
| E0422Z1T75  | ALCASILK 2/0 22 1/2 taper point 75        |
| E0326Z1T75  | ALCASILK 0 26 1/2 taper point 75          |
| E03X6005    | ALCASILK 0 5x60cm WITHOUT NEEDLE          |
| E0530Z3T75  | ALCASILK 3/0 30 1/2 cutting edge 75       |
| E0439V3T75  | ALCASILK 2/0 39 3/8 cutting edge 75       |
| E0530V3T75  | ALCASILK 3/0 30 3/8 cutting edge 75       |
| E0526Z1T75  | ALCASILK 3/0 26 1/2 taper point 75        |
| E0430Z1T75  | ALCASILK 2/0 30 1/2 taper point 75        |
| E0335Z1T75  | ALCASILK 0 35 1/2 taper point 75          |
| E0524V3T75  | ALCASILK 3/0 24 3/8 cutting edge 75       |
| E0525Z3T75  | ALCASILK 3/0 25 1/2 cutting edge 75       |
| E05X6005    | ALCASILK 3/0 5x60cm WITHOUT NEEDLE        |
| A0364Z1T75  | ALCASORB 0 64 1/2 TAPER POINT 75          |
| A0264Z1T75  | ALCASORB 1 64 1/2 TAPER POINT 75          |
| A0617Z5T75  | ALCASORB 4/0 17 1/2 TAPER CUT 75          |
| A0717Z5T75  | ALCASORB 5/0 17 1/2 TAPER CUT 75          |
| B0237Z1T7   | ALCASORB RAPID 1 37 1/2 TAPER POINT 75    |
| B0426Z1T75  | ALCASORB RAPID 2/0 26 1/2 TAPER POINT 75  |
| B0437Z1T75  | ALCASORB RAPID 2/0 37 1/2 TAPER POINT 75  |
| B0518Z1T120 | ALCASORB RAPID 3/0 18 1/2 TAPER POINT 120 |
| B0526Z1T75  | ALCASORB RAPID 3/0 26 1/2 TAPER POINT 75  |
| B0330Z1T90  | ALCASORB RAPID 0 30 1/2 taper point 90    |
| B0340Z1T90  | ALCASORB RAPID 0 40 1/2 ROUND 90          |
| B0337Z1T90  | ALCASORB RAPID 0 37 1/2 taper point 90    |
| B0248Z1T90  | ALCASORB RAPID 1 48 1/2 taper point 90    |
| B0230Z1T90  | ALCASORB RAPID 1 30 1/2 taper point 90    |
| B0430Z1T75  | ALCASORB RAPID 2/0 30 1/2 taper point 75  |
| B0148Z1T100 | ALCASORB RAPID 2 48 1/2 TAPER POINT 100   |
| B0518Z1T70  | ALCASORB RAPID 3/0 18 1/2 TAPER POINT 70  |
| B0520Z1T75  | ALCASORB RAPID 3/0 20 1/2 taper point 75  |
| A0348Z1T75  | ALCASORB 0 48 1/2 TAPER POINT 75          |
| A0248Z1T75  | ALCASORB 1 48 1/2 TAPER POINT 75          |
| A0148Z1T75  | ALCASORB 2 48 1/2 TAPER POINT 75          |
| A0430Z1T75  | ALCASORB 2/0 30 1/2 TAPER POINT 75        |
| A0526Z1T75  | ALCASORB 3/0 26 1/2 TAPER POINT 75        |
| A0520Z1T75  | ALCASORB 3/0 20 1/2 TAPER POINT 75        |
| A0617Z1T75  | ALCASORB 4/0 17 1/2 TAPER POINT 75        |

**KATSAN**  
KATGÜT SAN. VE TİC. A.Ş.  
AOSB Mah. 10041 Sokak No:22  
Tel:02324860910 CİĞLİ/İZMİR  
CİĞLİ V.D. 02324866758

Katsan Katgut San. ve Tic. A.Ş.

t. +90 232 486 0910 - +90 232 462 0196 - f. +90 232 486 3379

w. www.katsanas.com - m. info@katsanas.com

a. AOSB 10041 Sk. No:22 Cigli, Izmir, TURKEY



|            |                                              |
|------------|----------------------------------------------|
| A0715Z1T75 | ALCASORB 5/0 15 1/2 TAPER POINT 75           |
| A0717Z1T75 | ALCASORB 5/0 17 1/2 taper point 75           |
| F0813Z1T75 | ALCALENE 6/0 13 1/2 taper point 75           |
| F0522Z1T75 | ALCALENE 3/0 22 1/2 taper point 75           |
| F0713Z1T45 | ALCALENE 5/0 13 1/2 taper point 45           |
| F0230Z1T90 | ALCALENE 1 30 1/2 taper point 90             |
| F0426Z1T75 | ALCALENE 2/0 26 1/2 taper point 75           |
| F0620Z1T90 | ALCALENE 4/0 20 1/2 taper point 90           |
| F0619Z3T45 | ALCALENE 4/0 19 1/2 CUTTING EDGE 45          |
| F0617Z1F90 | ALCALENE 4/0 17 1/2 taper point double 90    |
| F0813Z1T75 | ALCALENE 6/0 13 1/2 taper point 75           |
| F0420Z1F90 | ALCALENE 2/0 20 1/2 DOUBLE TAPER POINT 90    |
| F0426Z1F90 | ALCALENE 2/0 26 1/2 taper point double 90    |
| F0526Z1F90 | ALCALENE 3/0 26 1/2 taper point double 90    |
| F0617Z1F90 | ALCALENE 4/0 17 1/2 taper point double 90    |
| F0716Z1F90 | ALCALENE 5/0 16 1/2 ROUND DOUBLE NEEDLE 90   |
| H0617Z1T90 | ALCADINONE 4/0 17 1/2 TAPER POINT 90         |
| H0526Z1T90 | ALCADINONE 3/0 26 1/2 TAPER POINT 90         |
| H0813Z1T70 | ALCADINONE 6/0 13 1/2 TAPER POINT 70         |
| C0436Z1T90 | ALCALACTINE 2/0 36 1/2 taper point 90        |
| C0522Z1T70 | ALCALACTINE 3/0 22 1/2 TAPER POINT 70        |
| H0525V3T75 | ALCADINONE 3/0 25 3/8 cutting edge 75        |
| H0617V3T75 | ALCADINONE 4/0 17 3/8 cutting edge 75        |
| H0717V3T75 | ALCADINONE 5/0 17 3/8 cutting edge 75        |
| H0713V3T75 | ALCADINONE 5/0 13 3/8 cutting edge 75        |
| C0345Z1T75 | ALCALACTINE 0 45 1/2 taper point 75          |
| C0436Z1T75 | ALCALACTINE 2/0 36 1/2 taper point 75        |
| D0436Z1T75 | ALCALACTINE RAPID 2/0 36 1/2 taper point 75  |
| D0537Z1T75 | ALCALACTINE RAPID 3/0 37 1/2 taper point 75  |
| D0517Z3T75 | ALCALACTINE RAPID 3/0 17 1/2 cutting edge 75 |
| D0345Z1T75 | ALCALACTINE RAPID 0 45 1/2 taper point 75    |
| D05X4506   | ALCALACTINE RAPID 3/0 WITHOUT NEEDLE 6X45    |

Date: 16.11.2022

KATSAN KATGÜT SAN. VE TİC. A.Ş.

**General Manager**

**KATSAN**  
Oğul Çizmeçgil  
AOSB Mah. 10041 Sk. No:22  
Tel:02324860910 - f:02324860196  
ÇİĞLİ VD. 350004 6758

Katsan Katgut San. ve Tic. A.Ş.

t. +90 232 486 0910 - +90 232 486 0196 - f. +90 232 486 3379

w. www.katsanas.com - m. info@katsanas.com

a. AOSB 10041 Sk. No:22 Çigli, Izmir, TURKEY