

RESORBA® Oral Sutures

state of the art wound closure

Our Distributor



Juraj Brozović

Split
Croatia



"RESORBA® sutures are a vital part of my everyday surgical armamentarium due to their bioinert and tensile properties. SUPRAMID ORAL and GLYCOLON® variants might be of particular interest to practitioners as all-rounders, exhibiting convenient handling traits and safe knots. When referring to a microsurgical approach in oral surgery, PVDF monofil sutures (RESOPREN®) definitely win the medal. Combining them with the multitude of needles available will add to one's soft tissue management, making it easier to achieve predictable outcomes in hard and soft tissue grafting procedures."

Rino Burkhardt

Zurich
Switzerland



"RESORBA® combines ultimate precision in needle production, biocompatibility and excellent handling properties of the materials and creativity in needle-thread combinations. RESORBA® sutures – my first choice in periodontal surgery when it comes to wound closure!"

Detlef Hildebrand

Berlin
Germany



"My favourite suturing-material is RESOLON® size 5-0 with DSM 16 and 6-0 with DSMF 11. It's a great pleasure to realize my suturing techniques with this kind of excellence. I always perform a nice wound closure with special techniques like non-interrupted suturings."

Istvan Urban

Budapest
Hungary



"After receiving RESORBA® sutures for testing, I was so impressed by their handling and quality that I changed my previous type of sutures to these and I am very satisfied with them."

Sascha A. Jovanovic

Los Angeles
USA



"Resorba sutures have been a great addition to my practice in addition to the PTFE sutures that we use and teach. They are monofilament, very tissue compatible, and user friendly. The needles are minimally invasive, but strong, and the sutures are very soft, but rigid."

The treatment of soft tissue to obtain correct aesthetic and functional results has high priority in all surgical interventions.

Two main aspects have to be observed to achieve these priorities:

- Form and management of wound edges → Flap Design
- Suturing technique → Selection of correct products

Aim of the correct wound closure is to:

- protect the fresh wound from infection
- minimize disturbance of wound healing
- stabilize the wound edges during healing phase
- avoid unnecessary tension on soft tissue
- allow haemostasis
- reconstitution of the aesthetic and functional continuity of the tissue
- reducing scar formation
- avoiding tissue shrinkage and loss of tissue substance

A wound is an interruption of the tissue integrity, caused by an injury or a surgical procedure, the tissue reacts with reparation and regeneration

- The correct repositioning of the wound edges, allows an acceleration of the healing processes
- The risk of an infection is reduced

Structure of the Thread:

- braided sutures offer bacteria a biological niche, which are difficult to reach by the immunological defense of the body (high capillarity)

Material Source:

- silk is a natural protein which could cause a foreign body reaction; it should not be used in dental surgery

Suture removal:

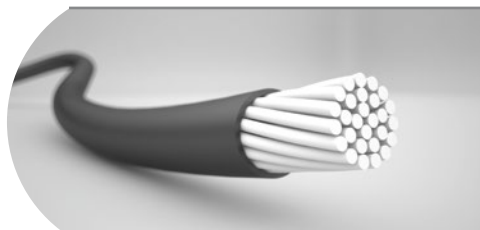
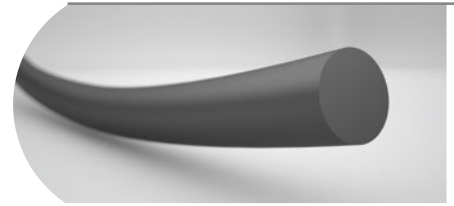
- using a non-absorbable material, or when removing absorbable suture, the surgeon must take care, not to pull the contaminated part (knot and suture part that have been exposed to oral cavity) through the wound

Surgical suture material – suggestions for dental indications

Non-absorbable material

- long-term durability with simultaneous high biocompatibility
- optimal tissue compatibility in the body due to the careful selection of materials and refining process
- easy removal

Non-absorbable suture materials remain virtually unchanged in body tissues. Once the scar tissue of the wound edges has become sufficiently strong to hold the wound together, the doctor removes the suture material by simply pulling it out.



Monofilament



Pseudomonofilament

Absorbable material

- for tissue adaptations where the need for mechanical support is time-restricted
- problem-free disintegration and elimination
- optimum biocompatibility due to the chemical properties and refinements

Absorbable suture materials hold the wound edges in place during the healing phase. During this time their tensile and breaking strength gradually diminishes. Absorbable suture materials are broken down either by endogenous proteolytic enzymes or by hydrolysis (in the case of PGA *RESORBA*®, PGA *resoquick*™ and GLYCOLON®).



Name	Material Type	Structure	Colour	USP Sizes	Features
RESOTEX® ORAL	Polyamide	Monofilament	black	4/0, 5/0, 6/0, 7/0	<ul style="list-style-type: none"> • Non absorbable • Non irritating • Soft • Easy passage through tissue • Perfect handling and knotting
RESOLON®	Polyamide	Monofilament	blue	5/0, 6/0, 7/0	
RESOTEX® ORAL/ RESOLON®, monofilament, non-absorbable, made from polyamide 6-6/6, extruded from a copolymer of polyamide 6 and polyamide 6/6. RESOTEX® ORAL/ RESOLON® undergoes special treatment during the manufacturing process, which accounts for its above average softness and flexibility.					
NYLON	Polyamide	Monofilament	black	7/0	<ul style="list-style-type: none"> • Non-absorbable • Very soft and supple • Perfect handling and knotting • Easy passage through tissue • No capillarity • Minimal tissue reactions
NYLON is made by polycondensation of hexamethylenediamine and adipic acid to polyamide 6. On account of its very high tensile strength, even with the smallest of thread diameters, NYLON is especially well-suited for the finest of sutures in microsurgery.					
RESOPREN®	Polyvinylidene difluoride (PVDF)	Monofilament	blue	5/0, 6/0, 7/0	<ul style="list-style-type: none"> • Non absorbable • Low friction • Ideal for running subcuticular sutures • Good flexibility and elasticity • High tensile strength • Non irritating • Hydrophobic
RESOPREN® has hydrophobic, inert and non-aging characteristics, making this thread especially suitable for permanent implants in which the material has to remain in the tissue for a long period of time.					
DENTOFIL™*	Polytetrafluoroethylene (PTFE)	Monofilament	white	3/0, 4/0, 5/0	<ul style="list-style-type: none"> • Non-absorbable • Very supple • Very tear-resistant • Easy to tie
Dentofil™* is a non-absorbable, extremely smooth suture material made from polytetrafluoroethylene (PTFE) that is very strong, knots well, and is biologically inert.					
SUPRAMID ORAL	Polyamide	Pseudo Monofilament	black	4/0	<ul style="list-style-type: none"> • Non absorbable • Soft • High tensile strength • Good knotting properties • Exceptional handling qualities • Smooth uniform surface allowing effortless passage through tissue • Easy removal
SUPRAMID	Polyamide	Pseudo Monofilament	black white		
SUPRAMID ORAL / SUPRAMID: monofilament, non-absorbable, made from a copolymer of polyamide 6 and polyamide 6/6. In diameters up to 4/0, it is supplied as pseudomonofilament made from polyamide 6/6, a polymer of hexamethylenediamine and adipic acid with a coating of polyamide 6, an ε-caprolactam polymer.					

Name	Material Type	Structure	Colour	USP Sizes	Remaining Tensile Strength	Features
GLYCOLON® ORAL	Polyglycolic acid-caprolactone	Monofilament	violet	5/0	7 days = 30%	<ul style="list-style-type: none"> • Short term wound support • Low tissue reaction • Excellent handling • Perfect knot security • High tensile strength • Smooth tissue passage
GLYCOLON®	Polyglycolic acid-caprolactone	Monofilament	violet undyed	4/0, 5/0, 6/0		
GLYOLON® ORAL / GLYCOLON® has a very smooth surface, which allows long suture techniques with minimal tissue trauma. The degradation rate in comparison with PGA RESORBA® is clearly reduced by the specially selected ratio of polyglycolic acid and caprolactone.						
PGA RESORBA®	Polyglycolic acid	Multifilament braided coated	violet undyed	4/0, 5/0, 6/0	18 days=50%	<ul style="list-style-type: none"> • Mid term wound support • Soft & flexible • High tensile strength • Perfect knot security
PGA RESORBA® is a braided suture with applications in soft tissue approximation and/or ligation where a strong absorbable suture is needed.						
PGA resoquick™	Polyglycolic acid	Multifilament braided coated	undyed	4/0, 5/0, 6/0	6 days=50%	<ul style="list-style-type: none"> • Short term wound support • High tensile strength • Perfect knot security
PGA resoquick™ can be used for specialties where rapid absorption may play a significant role in operative success.						

SURGICAL NEEDLES

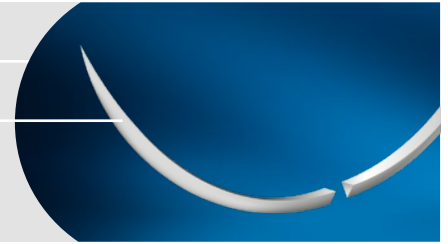
RESORBA® provides a large needle range - more information on request.

Needle body - profile and point

Reverse cutting needle



3/8-circle = DS, DSM

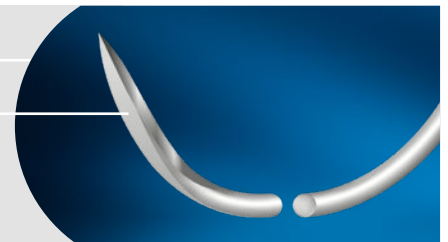


- triangular needle cross-section
- available with PREMIUM-CUT-M

Round-bodied cutting needle



1/2-, 3/8-circle, asymptotic or straight = HRT, DRT, GRT, ART



- needle point with three cutting edges, thus producing a narrow puncture canal which easily penetrates tissue

curvature	used mostly		straight = G	asymptotic = A
	1/2-circle = H	3/8-circle = D		
Numbers indicate the straight (extended) length of the needle in mm	allrounder posterior deeper layers	allrounder anterior mucoperiost flap	interdental	muco-gingival surgery

Most common needle sizes 1:1

3/8 circle, cutting = DS PREMIUM-CUT = DSM	1/2 circle round bodied, trocar point = HRT	straight, round bodied = GR
▽ DSM 11	▼ HRT 16	● GR 22
▽ DSM 13	▼ HRT 18	
▽ DSM 16	Asymptotic, round bodied, trocar point = ART	
▽ DSM 18	▼ ART 13	
	▼ ART 25	

DENTAL SUTURES

Designed especially for oral procedures –
special suture range with needles & threads

RESOTEX® ORAL

- Non-absorbable monofilament suture
- Special treatment for increased suppleness
- Premium tempered steel needle
- Available in 4/0, 5/0, 6/0, 7/0
- Various needle types



GLYCOLON® ORAL

- Absorbable monofilament suture
- Short term absorption
- Premium tempered steel needle
- Available in 5/0
- Needles in 3/8 circle



SUPRAMID ORAL

- Non-absorbable polyamide suture
- Pseudomonofilament structure
- Premium tempered steel needle
- Available in 4/0
- Needle types: HS 18 and HRT 18



DENTOFIL™*

- Non-absorbable
- Monofilament structure
- Premium tempered steel needle
- Available in 3/0, 4/0, 5/0
- Various needle types



RESORBA® needles are designed for specific indications, surgical techniques, and tissue conditions.

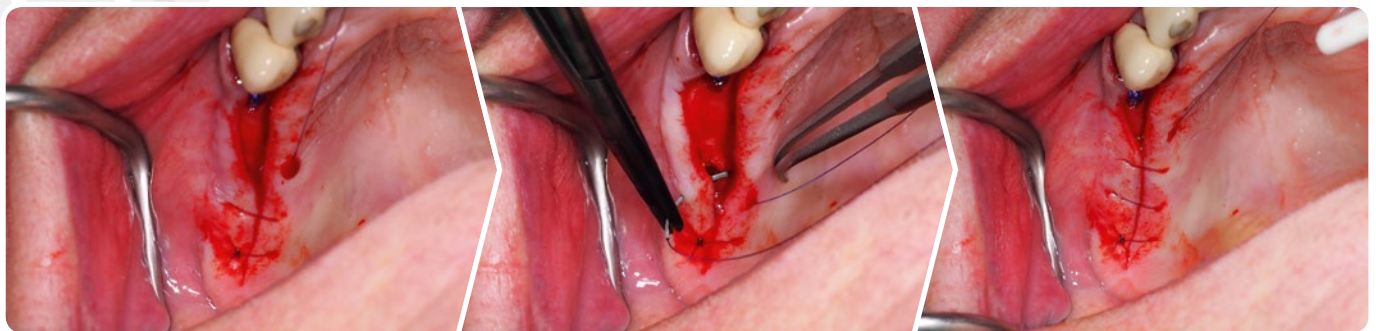
- atraumatic due to optimal transition between needle and thread
- special surface treatment and precision grinding ensures minimal resistance to penetration and smooth passage through the tissue

CLINICAL CASES

Continuous suturings

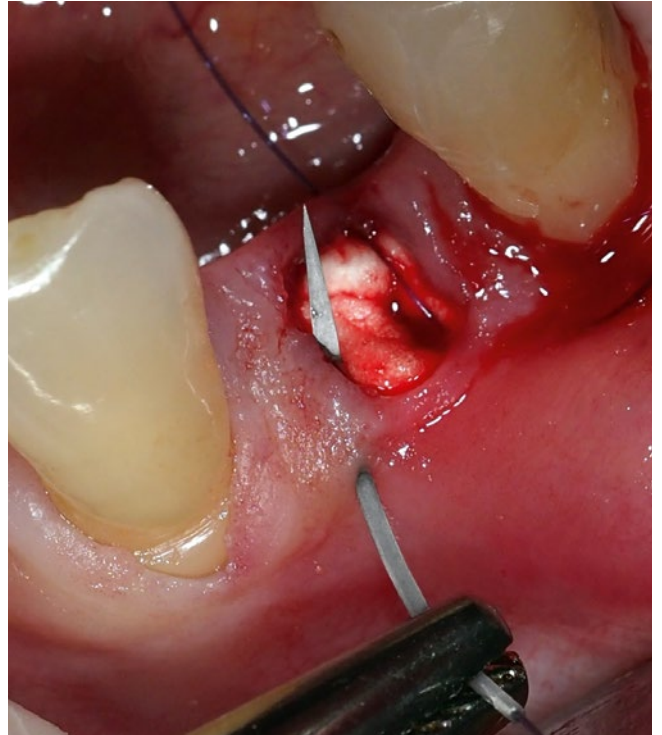
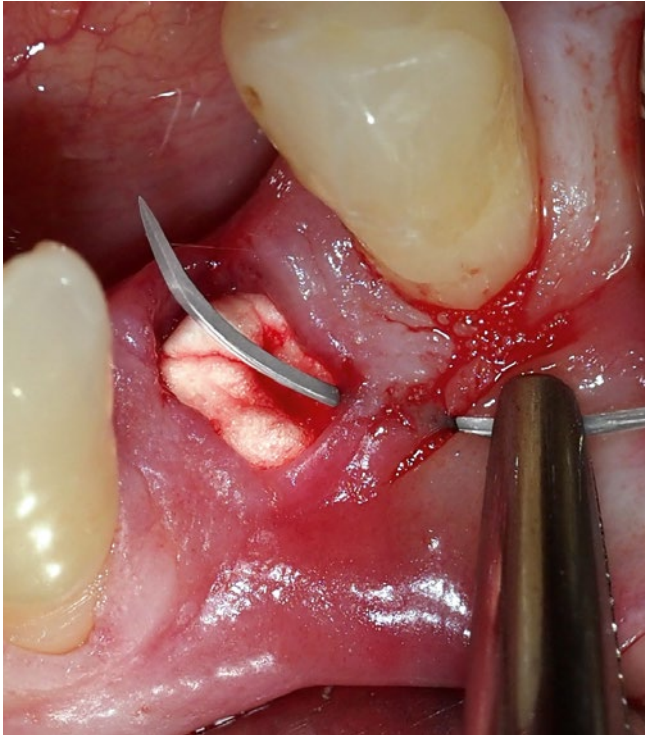
Clinical pictures with courtesy of Dr. Juraj Brozović, Split, Croatia

Crestal incision sutured with
GLYCOLON® ORAL 5/0 with DSM 16mm



CLINICAL CASES

Cross-mattress suture



GLYCOLON® ORAL 5/0 with DSM 18mm
Extraction socket treated with PARASORB® Cone

