



Electrochem[®]
Ultra Performance Silicones & TPE
ELECTROCHEM SILICONES LTD

Ultra Performance Medical Tubing



Welcome to our Company!

ELECTROCHEM SILICONES Ltd[®] (est. 1972, Germany, Hellas), designs, produces and supplies a great variety of flexible tubing and profiles made of Ultra Performance Silicones, TPEs and Specialty Polymers for **medical applications, industrial applications for food & beverage a.o.**, by implementing over 40 years of scientific experience.

Our Company uses highest quality Silicone Elastomers, Latex free, Thermoplastic & Specialty Polymers with long term tested chemical formulas, and offers in the world market products in conformity to International Standards i.e. **ISO 9001:2015, ISO 13485:2016, Directives 93/42/EEC & 10/2011/EU, European Pharmacopoeia, United States Pharmacopoeia, FDA** a.o.

Our product portfolio is mainly addressed to markets with strict specifications and includes:

- ⤴ **Silicone Tubing for Medical use with or without X-Ray opaque line**
Our Medical Silicone Tubing Portfolio is based on our *Elsil-Pt*[®] (Platinum Cured), *Elsil*[®] (Peroxide Cured), *Elsil/XP* & *Elsil/X*[®] (X-Ray detectable), *Elhard*[®] (Peroxide Cured, Transparent Hard) & *Elred*[®] (Peroxide Cured, Red Hard) Silicone Elastomers.
- ⤴ **TPE (Thermoplastic Elastomer) Tubing for Medical use**
Our TPE Tubing Portfolio is based on our *Elte*[®] TPE/SEBS & SEPS and other Polymers.
- ⤴ **Flexible Clear Thermoplastic Tubing for Medical use**
Our standard Medical Thermoplastic Tubing Portfolio is based on our *Devia*[®] & *Devia/G*[®] (DEHP free) families of Thermoplastic Polymers.
- ⤴ **Yellow[®] (No Latex - No PVC) Tubing for Medical use**
Our Medical Yellow[®] Tubing Portfolio is based on our *Elye*[®] Special Formulas.
- ⤴ **Silicone & Flexible Plastic Tubing for Food & Beverage related industry**
Our Tubing Portfolio for Food & Beverage is based on our *Elsil-FGi*[®] and *Elsil-FMi*[®] (Platinum Cured) & *Elsil-FG*[®] and *Elsil-FM*[®] (Peroxide Cured) Silicone Elastomers, on our *Devia 6F*[®] & *Devia 7F*[®] (DEHP free) Plastics and on our *Delan-AS*[®] & *Delan-AF* flexible TPV/TPE's.
- ⤴ **Extruded Silicone Elastomer Profiles for all kind of applications**
Our Silicone Profiles Portfolio is based on over 1500 chemical formulas.

ELECTROCHEM SILICONES Ltd[®] is certified to EN ISO 9001:2015, EN ISO 13485:2016 & DY8d/1348 MoH (93/42/EEC) and is registered in Hellenic Drugs Organization (E.O.F.).

Our Medical Tubing Portfolio at a glance

UltraClear™
Silicone Tubing



PLATINUM CURED FORMULAS

see page 4

UltraSafe™
Silicone Tubing



PEROXIDE CURED FORMULAS

see page 5

X-Ray opaque
Silicone Tubing



PLATINUM CURED AND
PEROXIDE CURED FORMULAS

see page 6

Hard Silicone Tubing



PEROXIDE CURED FORMULAS

see page 7

Multi Lumen/Multi Channel
Silicone Tubing



PLATINUM CURED AND
PEROXIDE CURED FORMULAS

see page 8

Yellow™ Tubing



NO LATEX CONTAINING!

see page 9

TPE Tubing



PVC, SILICONE AND
LATEX FREE FORMULAS

see page 10

Straight Plastic Tubing



DEHP FREE FORMULAS

see page 11

Multi Lumen Plastic Tubing



DEHP FREE FORMULAS

see page 12

Bubble Plastic Tubing



DEHP FREE FORMULAS

see page 13

Green Bubble Plastic Tubing



DEHP FREE FORMULAS

see page 14

SILICONE TUBING FOR MEDICAL USE MTi MEDICAL - PLATINUM CURED FORMULAS



SPECIFICATIONS

Material	<i>Elsil-Pt®</i> (Platinum Cured) New Generation Silicone (VMQ Quality – Medical Grade, Non-Recycled) for UltraClear™ process
Appearance	Transparent
Colour	None
Shape	Circular
Temperature Range	-45°C to +180°C
Properties	Excellent heat stability, highly transparent, clear, odourless, tasteless, non-toxic, sterilizable (plasma, steam, EtO a.o.), unmeltable, highly elastic, non deformable, top mechanical properties, top clarity
Dimensions	From I.D. × O.D = 1,0 × 2,0 mm up to I.D. × O.D = 12,5 × 19,0 mm (over 150 combinations). Other dimensions after request
Uses	Suction (single use), liquid transportation & drainage in all human & veterinary surgical operations. Connection of all types medical equipment & devices
Length/ Package	25 m rolls (or other length on request) in PE transparent bags firmly sealed
Standards/ Certification	EN ISO 9001:2015, EN ISO 13485:2016, DY8d/1348 (M.o.H.), CE Mark, Hellenic Drug Organization (E.O.F.) approval
Classification	Class I (MDD 93/42/EEC), USP VI (after agreement)

AVAILABLE DIAMETERS Inner Ø × Outer Ø in mm

1×2	2×4	3×5	3×6	4×7	4×8	5×8	5×9	6×9	6×10	6×12	7×10	7×11
7×12	7×13	8×11	8×12	8×13	8×14	9×12	9×13	10×14	10×15	10×18	11×16	12,5×19

and over 150 combinations

SILICONE TUBING FOR MEDICAL USE MT MEDICAL - PEROXIDE CURED FORMULAS



SPECIFICATIONS

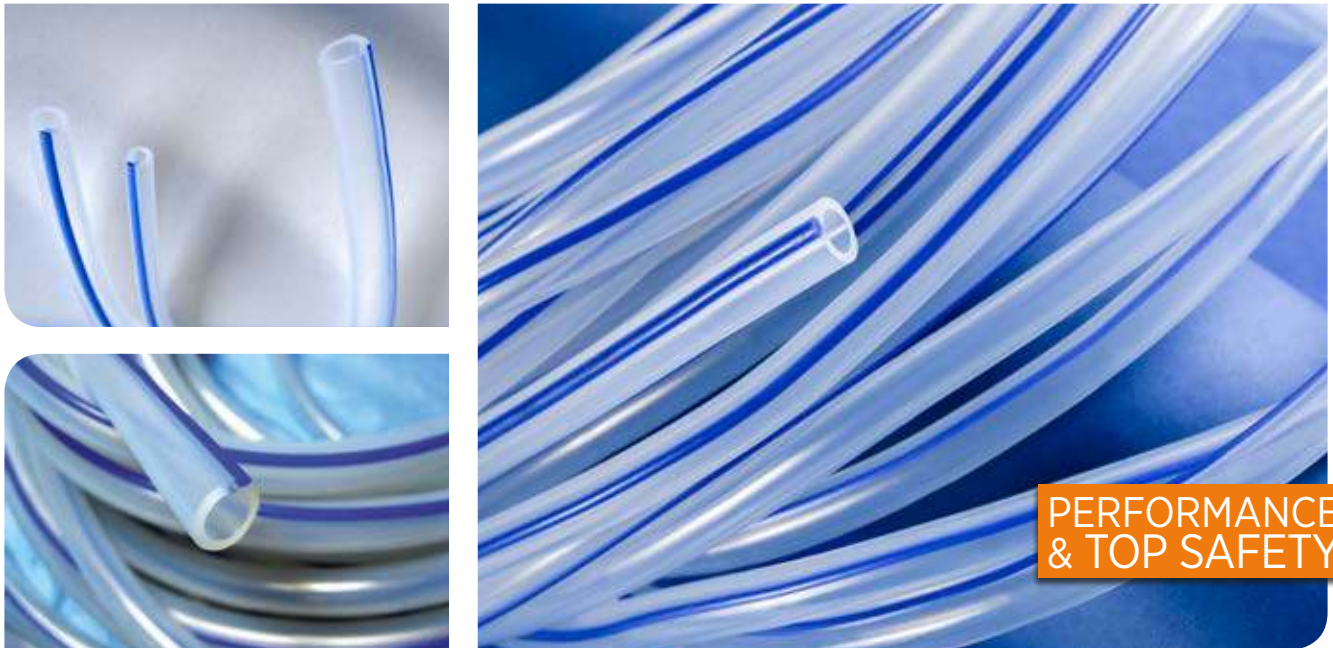
Material	<i>Elsil</i> ® (Peroxide Cured) Silicone (VMQ Quality – Medical Grade, Non-Recycled) for UltraSafe™ process
Appearance	Transparent
Colour	None
Shape	Circular
Temperature Range	-45°C to +180°C
Properties	Excellent heat stability, transparent, odourless, tasteless, non-toxic, sterilizable (plasma, steam, EtO a.o.), unmeltable, highly elastic, non deformable, top mechanical properties, top safety
Dimensions	From I.D. × O.D = 1,0 × 2,0 mm up to I.D. × O.D = 12,5 × 19,0 mm (over 150 combinations). Other dimensions after request
Uses	Suction (single use), liquid transportation & drainage in all human & veterinary surgical operations. Connection of all types medical equipment & devices
Length/ Package	25 m rolls (or other length on request) in PE transparent bags firmly sealed
Standards/ Certification	EN ISO 9001:2015, EN ISO 13485:2016, DY8d/1348 (M.o.H.), CE Mark, Hellenic Drug Organization (E.O.F.) approval
Classification	Class I (MDD 93/42/EEC)

AVAILABLE DIAMETERS Inner Ø × Outer Ø in mm

1×2	2×4	3×5	3×6	4×7	4×8	5×8	5×9	6×9	6×10	6×12	7×10	7×11
7×12	7×13	8×11	8×12	8×13	8×14	9×12	9×13	10×14	10×15	10×18	11×16	12,5×19

and over 150 combinations

SILICONE TUBING WITH RADIO OPAQUE (X-RAY DETECTABLE) LINE FOR MEDICAL USE



SPECIFICATIONS

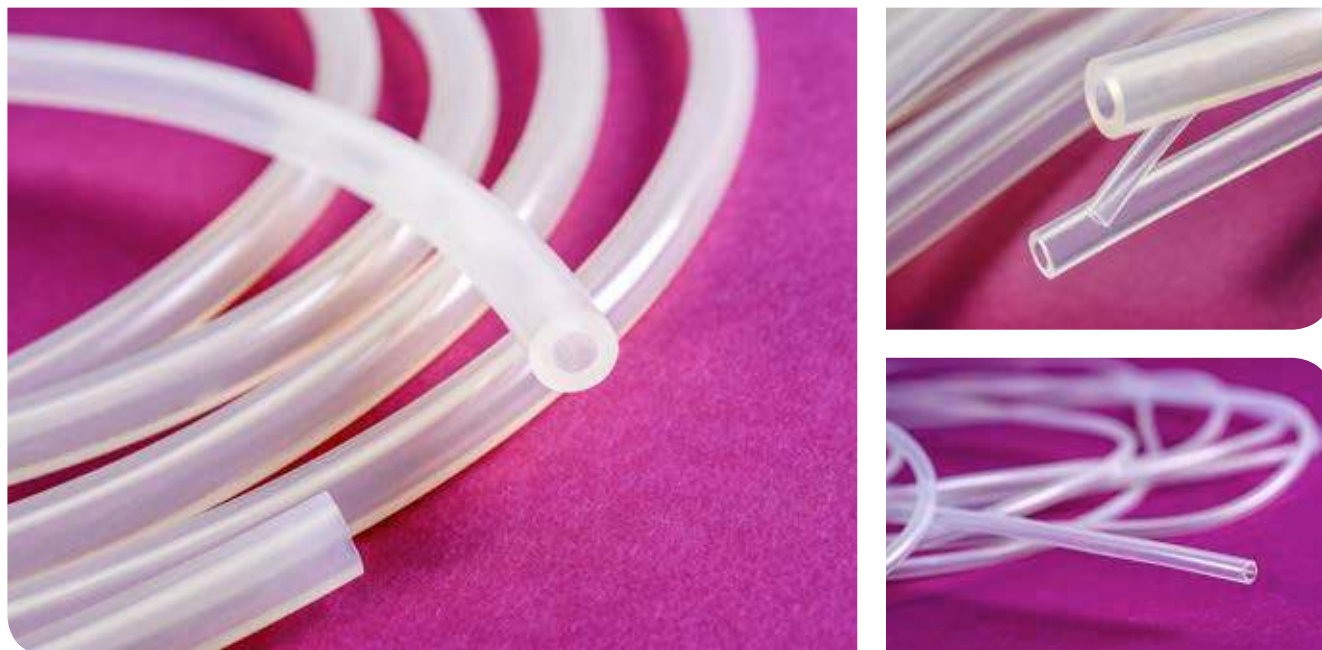
Material	Tubing: <i>Elsil-Pt®</i> (Platinum Cured) & <i>Elsil®</i> (Peroxide Cured) Silicone (VMQ Quality – Medical Grade, Non-Recycled) Radio Opaque Line: <i>Elsil/XP®</i> (Platinum Cured) & <i>Elsil/X®</i> (Peroxide Cured) Silicone (VMQ Quality – Medical Grade, Non-Recycled)
Appearance	Transparent
Colour	Tubing: None Radio Opaque Line: Blue (green and yellow available)
Shape	Circular
Temperature Range	-45°C to +180°C
Properties	X-Ray detectable coextruded (not glued) line. Excellent heat stability, transparent, odourless, tasteless, non-toxic, sterilizable (plasma, steam, EtO a.o.), unmeltable, highly elastic, non deformable, top mechanical properties, TOP SAFE
Dimensions	From I.D. × O.D = 3,0 × 5,0 mm up to I.D. × O.D = 12,5 × 19,0 mm (over 150 combinations). Other dimensions after request
Uses	Suction (single use), liquid transportation & drainage in all human & veterinary surgical operations. Connection of all types medical equipment & devices
Length/ Package	25 m rolls (or other length on request) in PE transparent bags firmly sealed
Standards/ Certification	EN ISO 9001:2015, EN ISO 13485:2016, DY8d/1348 (M.o.H.), CE Mark, Hellenic Drug Organization (E.O.F.) approval
Classification	Class I (MDD 93/42/EEC), USP VI (after agreement)

AVAILABLE DIAMETERS Inner Ø × Outer Ø in mm

3 × 5	4 × 8	5 × 8	5 × 9	6 × 9	6 × 10	6 × 12	7 × 10	7 × 11	7 × 12	7 × 13	8 × 11	8 × 12
8 × 13	8 × 14	9 × 12	9 × 13	10 × 14	10 × 15	10 × 18	11 × 16	12,5 × 19				

and over 150 combinations

HARD SILICONE TUBING FOR MEDICAL USE MTH MEDICAL - PEROXIDE CURED FORMULAS



SPECIFICATIONS

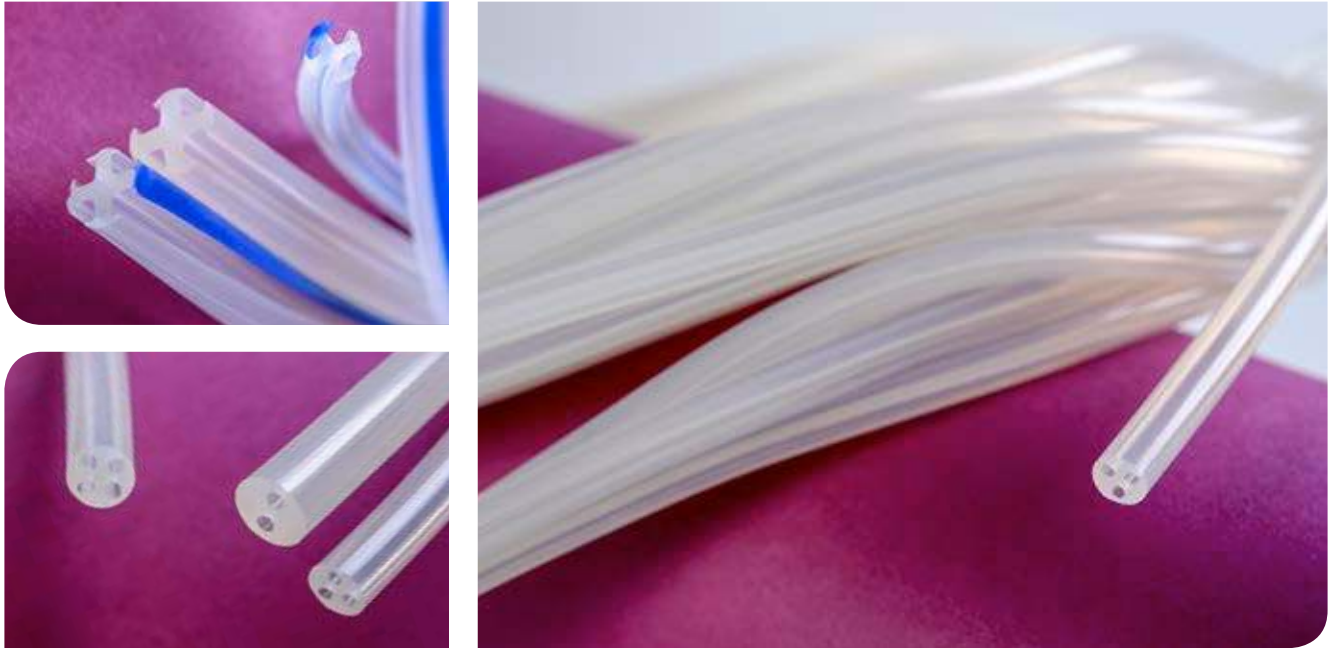
Material	<i>Elhard</i> ® (Peroxide Cured) Silicone (VMQ Quality - Medical Grade, Non-Recycled)
Appearance	Transparent
Colour	None
Shape	Circular
Temperature Range	-45°C to +180°C
Properties	Excellent heat stability, transparent, odourless, tasteless, non-toxic, sterilizable (plasma, steam, EtO a.o.), unmeltable, highly elastic, non deformable, top mechanical properties
Dimensions	From I.D. × O.D = 2,0 × 4,0 mm up to I.D. × O.D = 12,5 × 19,0 mm (over 150 combinations). Other dimensions after request
Uses	Suction (single use) for >60% vacuum, liquid transportation & drainage in all human & veterinary surgical operations. Connection of all types medical equipment & devices
Length/ Package	25 m rolls (or other length on request) in PE transparent bags firmly sealed
Standards/ Certification	EN ISO 9001:2015, EN ISO 13485:2016, DY8d/1348 (M.o.H.), CE Mark, Hellenic Drug Organization (E.O.F.) approval
Classification	Class I (MDD 93/42/EEC)

AVAILABLE DIAMETERS Inner Ø × Outer Ø in mm

2×4	3×5	3×6	4×7	4×8	5×8	5×9	6×9	6×10	6×12	7×10	7×11	7×12
7×13	8×11	8×12	8×13									

and over 100 combinations

MULTI LUMEN/MULTI CHANNEL SILICONE TUBING FOR MEDICAL USE



SPECIFICATIONS

Material	<i>Elsil-Pt®</i> (Platinum Cured) & <i>Elsil®</i> (Peroxide Cured) Silicone (VMQ Quality - Medical Grade, Non-Recycled)
Appearance	Transparent
Colour	None
Shape	Circular, Rectangular
Lumens	up to 6
Temperature Range	-45°C to +180°C
Properties	Excellent heat stability, transparent, odourless, tasteless, non-toxic, sterilizable (plasma, steam, EtO a.o.), unmeltable, highly elastic, non deformable, top mechanical properties
Dimensions	From I.D. × O.D = 1,0 × 2,0 mm up to I.D. × O.D = 12,5 × 19,0 mm (over 150 combinations). Other dimensions after request
Uses	Multi-purpose medical component
Length/ Package	25 m rolls (or other length on request) in PE transparent bags firmly sealed
Standards/ Certification	EN ISO 9001:2015, EN ISO 13485:2016, DY8d/1348 (M.o.H.), CE Mark, Hellenic Drug Organization (E.O.F.) approval
Classification	Class I (MDD 93/42/EEC), USP VI (after agreement)

AVAILABLE DIAMETERS

Inner Ø × Outer Ø in mm

Inner Diameter: from 1mm to 8mm

Outer diameter: from 4mm to 10mm

YELLOW® NON LATEX TUBING FOR MEDICAL USE TOTALLY SUPERIOR TO COMMON LATEX



SPECIFICATIONS

Material	Elye® Polymer (Medical Grade - Non Recycled)
Appearance	Transparent
Colour	Yellow
Shape	Circular
Temperature Range	Constant properties from -20°C to +140°C
Properties	No Latex containing! Totally superior to common latex, excellent heat stability, transparent, odourless, tasteless, non-toxic, sterilizable (plasma, steam, EtO a.o.), unmeltable, highly elastic, non deformable, top mechanical properties
Dimensions	From I.D. × O.D = 1,0 × 2,0 mm up to I.D. × O.D = 11,0 × 16,0 mm (over 150 combinations). Other dimensions after request
Uses	Liquid transportation & drainage in all human & veterinary surgical operations
Length/ Package	25 m rolls (or other length on request) in PE transparent bags firmly sealed
Standards/ Certification	EN ISO 9001:2015, EN ISO 13485:2016, DY8d/1348 (M.o.H.), CE Mark, Hellenic Drug Organization (E.O.F.) approval
Classification	Class I (MDD 93/42/EEC)

AVAILABLE DIAMETERS Inner Ø × Outer Ø in mm

1×2	2×4	3×5	3×6	4×8	5×8	5×9	6×9	6×10	7×10	7×11	8×12	8×13
9×12	9×13	10×14	10×15	11×16								

and over 150 combinations

TPE TUBING FOR MEDICAL USE

EPT MEDICAL - PVC, LATEX & SILICONE FREE FORMULAS



 **OIL FREE & LOW FRICTION GRADES AVAILABLE**

SPECIFICATIONS

Material	100% Medical Grade <i>Elte®</i> , <i>Elte OF®</i> & <i>Elte LF®</i> Thermoplastic Elastomer
Appearance	Transparent
Colour	None
Shape	Circular
Temperature Range	From -50°C to +125°C (unstressed material)
Properties	Excellent heat stability, transparent, odourless, tasteless, non-toxic, sterilizable (plasma, steam, EtO a.o.), hardly meltable, high modulus, non deformable, top mechanical properties
Dimensions	From I.D. × O.D = 3,0 × 5,0 mm up to I.D. × O.D = 16,0 × 20,0 mm (over 100 combinations). Other dimensions after request
Uses	Multi-purpose medical component
Length/ Package	30 m rolls (or other length on request) in PE transparent bags firmly sealed
Standards/ Certification	EN ISO 9001:2015, EN ISO 13485:2016, DY8d/1348 (M.o.H.), CE Mark, Hellenic Drug Organization (E.O.F.) approval
Classification	Class I (MDD 93/42/EEC), ISO 10993 & USP VI available

AVAILABLE DIAMETERS Inner Ø × Outer Ø in mm

2×4	3×5	3×6	4×7	4×8	5×8	5×9	6×9	6×10	6×12	7×10	7×11
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and many other combinations

PLASTIC TUBING FOR MEDICAL USE VT MEDICAL - DEHP FREE FORMULAS



SPECIFICATIONS

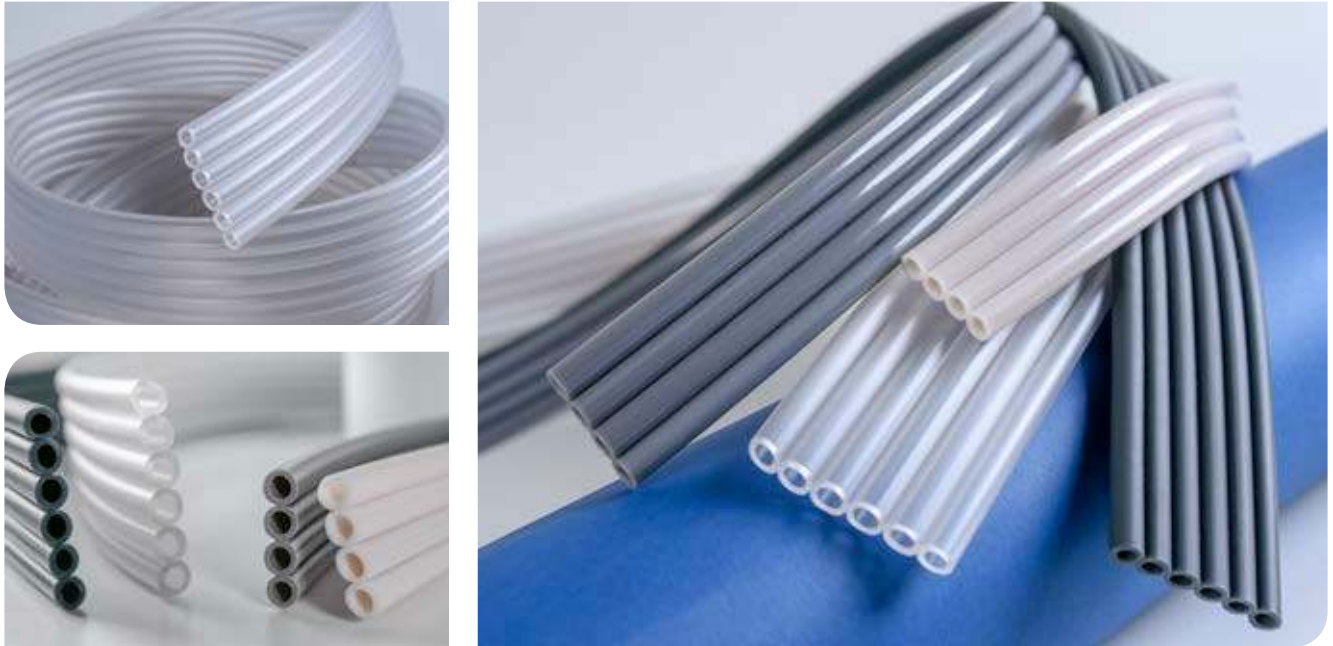
Material	100% Medical Grade <i>Devia</i> ® (DEHP Free) Thermoplastic Homo polymer (Non-Recycled)
Appearance	Transparent (<i>Devia</i> ®) Crystal Clear (<i>Devia CC</i> ®)
Surface	Glossy / Frosty (after agreement)
Colour	None to slightly purplish
Shape	Circular
Temperature Range	Constant properties from -20°C to +90°C (126°C for short time periods)
Properties	Excellent heat stability, transparent, odourless, tasteless, non-toxic, sterilizable (plasma, steam, EtO a.o.), hardly meltable, high modulus, non deformable, top mechanical properties
Dimensions	From I.D. × O.D = 3,0 × 5,0 mm up to I.D. × O.D = 16,0 × 20,0 mm (over 100 combinations). Other dimensions after request
Uses	Ideal for suction under vacuum & liquid transportation in all human surgical operations & health care
Length/ Package	30 m rolls (or other length on request) in PE transparent bags firmly sealed
Standards/ Certification	EN ISO 9001:2015, EN ISO 13485:2016, DY8d/1348 (M.o.H.), CE Mark, Hellenic Drug Organization (E.O.F.) approval
Classification	Class I (MDD 93/42/EEC)

AVAILABLE DIAMETERS Inner Ø × Outer Ø in mm

3×5	3×6	4×7	4×8	5×8	5×9	6×9	6×10	6×12	7×10	7×11	7×12	7×13
8×11	8×12	8×13	8×14	9×12	9×13	10×14	10×15	10×18	11×16	12,5×19	16×20	

and over 150 combinations

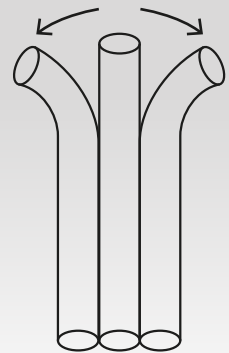
MULTI LUMEN PLASTIC TUBING FOR MEDICAL USE VTM MEDICAL - DEHP FREE FORMULAS



SPECIFICATIONS

Material	100% Medical Grade <i>Devia</i> ® (DEHP Free) Thermoplastic Homo polymer (Non-Recycled), <i>Delan</i> ® (TPV) Thermoplastic Rubber
Appearance	Transparent / Translucent / Coloured
Colour	acc. to RAL codes
Shape	Circular (Lumens)
Lumens	Up to 6
Temperature Range	Constant properties from -20°C to +120°C
Properties	Excellent heat stability, easily separatable lumens, odourless, tasteless, non-toxic, sterilizable (plasma, steam, EtO a.o.), hardly meltable, high modulus, non deformable, top mechanical properties
Dimensions	From I.D. × O.D = 2,0 × 4,0 mm up to I.D. × O.D = 6,0 × 8,0 mm (over 100 combinations). Other dimensions after request
Uses	Ideal for pumped air distribution and for suction under vacuum & liquid transportation in all human surgical operations & health care
Length/ Package	Rolls or straight pieces in requested length in PE transparent bags firmly sealed
Standards/ Certification	EN ISO 9001:2015, EN ISO 13485:2016, DY8d/1348 (M.o.H.), CE Mark, Hellenic Drug Organization (E.O.F.) approval
Classification	Class I (MDD 93/42/EEC)

Easy to separate



AVAILABLE DIAMETERS Inner Ø × Outer Ø in mm

From I.D. 2mm to O.D. 8mm

BUBBLE PLASTIC TUBING FOR MEDICAL USE VB MEDICAL -DEHP FREE FORMULAS

FLEXIBLE &
USER FRIENDLY



SPECIFICATIONS

Material	100% Medical Grade <i>Devia 505</i> ® (DEHP Free) Thermoplastic Homo polymer (Non-Recycled). <i>Devia 465</i> ® & <i>Devia 565</i> ® for alternative hardnesses
Appearance	Transparent
Colour	None
Shape	Circular
Temperature Range	Constant properties from -20°C to +90°C (126°C for short time periods)
Properties	Flexible, very friendly to user, excellent heat stability, transparent, odourless, tasteless, non-toxic, sterilizable (plasma, steam, EtO a.o.), hardly meltable, high modulus, non deformable, top mechanical properties
Dimensions	6 × 9, 7 × 10, 8 × 12 and other dimensions after request
Bubble	-9 × 12 mm (ref. to 6 × 9 mm dimension) per 95 ± 10 cm -10 × 13,5 mm (ref. 7 × 10 mm dimension) per 95 ± 10 cm -12 × 16 mm (ref. 8 × 12 mm dimension) per 95 ± 10 cm
Uses	Ideal for suction under vacuum & liquid transportation in all human surgical operations & healthcare. Connects all types of nozzles: from O.D. 4,0 mm up to O.D. 14,0 mm
Length/ Package	30 m rolls (or other length on request) in PE transparent bags firmly sealed
Standards/ Certification	EN ISO 9001:2015, EN ISO 13485:2016, DY8d/1348 (M.o.H.), CE Mark, Hellenic Drug Organization (E.O.F.) approval
Classification	Class I (MDD 93/42/EEC)



Variable
Diameter
Tube

AVAILABLE DIAMETERS Inner Ø × Outer Ø in mm

3 × 5 5 × 8 6 × 9 7 × 10 8 × 11 8 × 12

and other after request

GREEN BUBBLE PLASTIC TUBING FOR MEDICAL USE VBG MEDICAL - DEHP FREE FORMULAS



SPECIFICATIONS

Material	100% Medical Grade <i>Devia/G®</i> (DEHP Free) Thermoplastic Homo polymer (Non-Recycled)
Appearance	Transparent
Colour	Green
Shape	Circular
Temperature Range	Constant properties from -20°C to +90°C (126°C for short time periods)
Properties	Top mechanical properties. Non-collapsing walls. Excellent heat stability, transparent, odourless, tasteless, non-toxic, high modulus, non deformable
Dimensions	3×5, 5×8 and other dimensions after request
Bubble	– 5.5×9 mm (ref. to 3×5) per 100 ±10 cm – 8×12,5 mm (ref. to 5×8) per 100 ±10 cm Bubble's length is long for best cutting point choosing, easy assembling and perfect performance
Uses	Ideal for oxygen supply. Connection of suction sources to suction waste collection systems, suction catheter and other suction devices. Fits to all types of nozzles: from O.D. 5,0 mm up to O.D. 12,0 mm
Length/ Package	30 m rolls (or other length on request) in PE bags firmly sealed. In dispenser box or small carton box
Standards/ Certification	EN ISO 9001:2015, EN ISO 13485:2016, DY8d/1348 (M.o.H.), CE Mark, Hellenic Drug Organization (E.O.F.) approval
Classification	Class I (MDD 93/42/EEC)



AVAILABLE DIAMETERS Inner Ø × Outer Ø in mm

3×5 4×6 5×8

and other after request



Why ELECTROCHEM SILICONES®

Our Company is well known for designing, producing and supplying ultra performance elastomers.

We focus our research on successful product development that meets individual customer's requirements.

We, founders and owners of **ELECTROCHEM SILICONES**, personally guarantee Top Quality, Reliability, Innovation and Customer Support.

We value what we do and that is why we build strong working relationships with our customers.

Direct service is always present and customer's satisfaction is among our top priorities.

Through vertical and automatic production we achieve cost efficient operational excellence for our customers.

Our vendors and co-workers are carefully selected in order to enhance customer's trust.

ELECTROCHEM SILICONES with full respect to customers' exact needs exports successfully worldwide.

Quality

All our products are specially designed for our customers' needs.

Our company is well known for its intensive quality control. By providing technical solutions, by manufacturing innovative products and by being efficient and effective, our customers receive high quality products and services. All products are designed and manufactured according to the European and USA standards and recommendations.

ELECTROCHEM SILICONES has been approved by Lloyd's Register Quality Assurance to EN ISO 9001:2015 & EN ISO 13485:2016 Standards for the quality management system in designing, production and sales

of elastomers and specialty polymers for Medical and Industrial use. Additional approval by Lloyd's Register Quality Assurance exists to DY8d/1348 according to the Domestic Drug Association in compliance to the European Directive 93/42/EEC.

ELECTROCHEM SILICONES is also registered as medical devices manufacturer in Hellenic Research Center for Biomaterials. All our medical products are accompanied with the CE Mark (with Declaration of Conformity) acc.to 93/42/EEC and all our food grade products with the CE Mark (with Declaration of Conformity) acc. to 10/2011/EU.



This data presented in this brochure - whether verbal, in writing or by way of trials - are in accordance with the present state of our knowledge. Our advise does not release the user from the obligation to check its validity and to test our products as to their suitability for the intended processes and uses and does not absolve the user from carefully checking all supplies immediately upon receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The information given in this brochure should be checked by preliminary trials because conditions during processing over which we have no control, especially where other companies' materials are also been used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose. Our products are sold in accordance with our General Conditions of Sales, Purchase and Delivery.



ELECTROCHEM SILICONES Ltd

SILICONE ELASTOMERS – SPECIALTY POLYMERS
EN ISO 9001:2015 - EN ISO 13485:2016 CERTIFIED

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