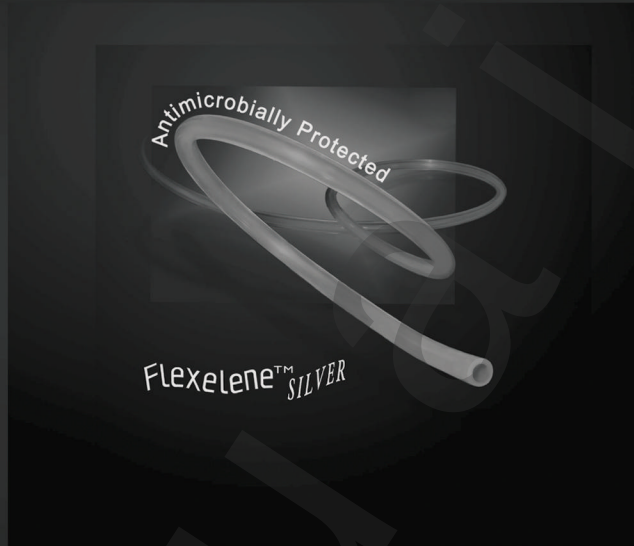




Flexelene™ SILVER Tubing

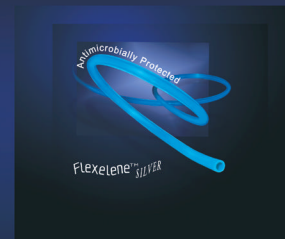


Antimicrobially Protected Tubing

From

Eldon James

Flexelene™ SILVER Tubing



Antimicrobially Protected Tubing

From

Eldon James

August, 2004

The Flexelene™ Silver Advantage

Flexelene™ Silver Tubing

Eldon James antimicrobially protected Flexelene™ Silver tubing incorporates the natural protection of silver, which prevents the growth of a broad range of microorganisms that can cause odors, affect taste, and lead to product deterioration. By utilizing AgION™ antimicrobial technology, which is FDA recognized and meets all applicable EPA standards, Eldon James Flexelene™ Silver tubing delivers “built in” protection to prevent the growth of bacteria, fungi, mold and mildew on the interior of the tubing.

Applications that can potentially benefit from the use of Eldon James antimicrobially protected Flexelene™ Silver tubing include: pure water transfer, water purification, water bottling, beverage lines, beer dispensing, dairy processing, pharmaceutical manufacture, bioscience, ice making technologies, drinking fountain systems, water dispensing kiosks and food dispensing systems.

Flexelene™ Silver tubing is certified to **NSF Standards 51& 61** for contact with food, and use in beverage and water applications.

Flexelene™ Silver

- Polyethylene based polymer – a standard class of material used in the water industry
- Pressure ratings similar to, or higher than, those of comparable polyurethane and PVC tubing
- Far exceeds the pressure capabilities of silicone
- Significantly more flexible than standard polyethylene tubing
- Typical working temperature range – 40°F to + 170°F (– 40°C to 76°C)
- Impact resistant at low temperatures • Maintains flexibility to – 40°F
- UV stable with excellent ozone resistance • Abrasion and chemical resistant
- Contains no toxic plasticizers and is silicone free
- Built in protection against bacterial growth within the tubing
- Effective against a broad spectrum of bacteria and other microorganisms
- Flexelene™ Silver CFXAG tubing is compatible with push-on compression fittings



Certified to
NSF/ANSI 61
NSF/ANSI 51

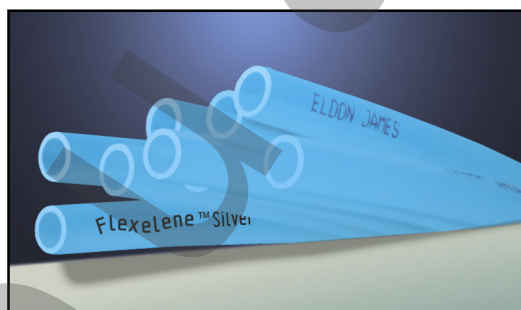
Data presented for properties of materials and chemical resistance is for reference only. Customer applications and conditions of use are beyond our control; therefore, it is imperative that customers test Eldon James products in their specific application to determine suitability. All information is provided without implied or expressed warranty or guarantee, and none of the information provided constitutes a recommendation or endorsement of any kind by Eldon James Corporation.

Antimicrobial Protection

Eldon James Flexelene™ Silver tubing incorporates AgION antimicrobial technology to protect against the build up of biofilm. Biofilms can form on surfaces, creating a continuous layer of undesirable polymer slime. The most effective way to prevent biofilm formation is to inhibit initial colonization and proliferation of bacteria. This is the primary mechanism by which AgION™ Antimicrobial combats biofilms.

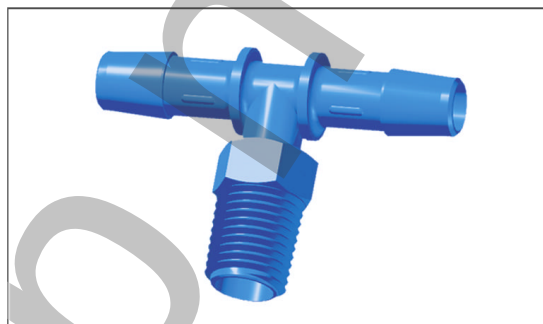
Bio efficacy – Testing of Eldon James Flexelene™ Silver shows that after a flow through of 40,000 liters of tap water; the tubing still provides up to a 6 log reduction in bacteria on the contact surface area of the tubing, after inoculation with test bacteria. (99.74% - 99.9999% reduction over a series of 9 test intervals).

Safety – The average silver content in tap water run through the tubing was well below $1\mu\text{g/liter}$. This means that a person would have to consume nearly 1,000 liters of water a day to approach the EPA reference dose (adult) of $5\mu\text{g/kg}$ of body weight per day.

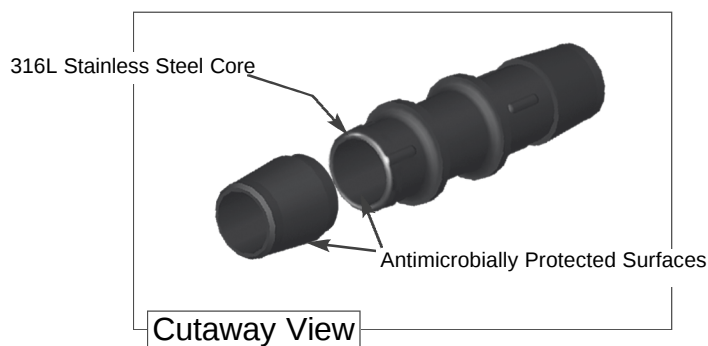


Eldon James Antimicrobially Protected AG fittings offer additional protection to a system's flow path. These fittings use the same built-in, silver ion antimicrobial technology as our Flexelene™ Silver tubing.

Kynar®, HDPE, Natural Polypropylene - AG Fittings



Stainless Steel - AG Fitting





Eldon James Corp.

Flexelene™ Silver Tubing

Part Number	ID	OD	Working PSI @72°F	Burst PSI @72°F	Wall Thickness	Bend Radius in.
FXAG1-2	1/16"	1/8"	110	420	1/32"	5/32"
FXAG1.5-2.5	3/32"	5/32"	86	260	1/32"	3/16"
FXAG2-4	1/8"	1/4"	150	450	1/16"	1/4"
FXAG3-5	3/16"	5/16"	96	320	1/16"	1/2"
FXAG4-6	1/4"	3/8"	73	220	1/16"	1"
FXAG5-7	5/16"	7/16"	67	200	1/16"	1 1/2"
FXAG6-8	3/8"	1/2"	53	160	1/16"	1 3/4"
FXAG6-10	3/8"	5/8"	Please call for	Availability		
FXAG8-10	1/2"	5/8"	48	145	1/16"	2 1/2"

Burst pressures are approximately 3 times the maximum working pressure. Higher temperatures will reduce the available working pressure. Results are based on tests at our facility under controlled conditions; therefore, Eldon James Corp. makes no warranty or claim as to the performance of Flexelene™ Silver in a specific application. It is strongly recommended that application-specific testing be done, particularly in situations where pressures approach the listed working PSI.

Flexelene™ Silver FXAG Quantity Pricing

Price Per 100 ft. Roll

Part Number	ID	OD	1-3 Rolls	4-9 Rolls	10-19 Rolls	20-99 Rolls
FXAG1-2	1/16"	1/8"	\$53.00	\$47.70	\$45.05	\$42.40
FXAG1.5-2.5	3/32"	5/32"	\$75.00	\$67.50	\$63.75	\$60.00
FXAG2-4	1/8"	1/4"	\$100.00	\$90.00	\$85.00	\$80.00
FXAG3-5	3/16"	5/16"	\$135.00	\$121.50	\$114.75	\$108.00
FXAG4-6	1/4"	3/8"	\$170.00	\$153.00	\$144.50	\$136.00
FXAG5-7	5/16"	7/16"	\$205.00	\$184.50	\$174.25	\$164.00
FXAG6-8	3/8"	1/2"	\$240.00	\$216.00	\$204.00	\$192.00
FXAG6-10	3/8"	5/8"	\$250.00	\$225.00	\$212.00	\$200.00
FXAG8-10	1/2"	5/8"	\$275.00	\$250.00	\$236.00	\$223.00

Eldon James antimicrobially protected components are designed with EPA recognized silver ion technology built into the product. Flow path areas within the Eldon James fittings are protected against the buildup of bacteria, mold, mildew, fungi and bio-film that can: degrade product quality, affect taste, and cause odors. Eldon James' products are *not* designed to protect the consumer through sanitization, disinfection or elimination of bacteria in the products that flow through them.



Eldon James Corp.

Flexelene™ Silver CFXAG Tubing



Compression Fitting Compatible Tubing

Part Number	OD	ID	Working PSI @72°F	Burst PSI @72°F	Wall Thickness	Bend Radius in.
CFXAG2-4	1/4"	.125"	150	450	1/16"	1/4"
CFXAG170-4	1/4"	.170"			0.08"	
CFXAG3-5	5/16"	.188"	96	320	1/16"	1/2"
CFXAG4-6	3/8"	.265"	73	220	1/16"	1"
CFXAG5-7	7/16"	.323"	66	200	1/16"	1 1/2"
CFXAG6-8	1/2"	.385"	53	160	1/16"	1 3/4"
CFXAG8-10	5/8"	.510"	48	145	1/16"	2 1/2"

Burst pressures are approximately 3 times the maximum working pressure. Higher temperatures will reduce the available working pressure. Results are based on tests at our facility under controlled conditions; therefore, Eldon James Corp. makes no warranty or claim as to the performance of Flexelene™ Silver in a specific application. It is strongly recommended that application-specific testing be done, particularly in situations where pressures approach the listed working PSI.

Flexelene™ Silver CFXAG Quantity Pricing

Price Per 100 ft. Roll

Compression Fitting Compatible Tubing

Part Number	OD	ID	1-3 Rolls	4-9 Rolls	10-19 Rolls	20-99 Rolls
CFXAG2-4	1/4"	.125"	\$100.00	\$90.00	\$85.00	\$80.00
CFXAG170-4	1/4"	.170"	\$117.50	\$105.75	\$99.88	\$94.00
CFXAG3-5	5/16"	.188"	\$135.00	\$121.50	\$114.75	\$108.00
CFXAG4-6	3/8"	.265"	\$170.00	\$153.00	\$144.50	\$136.00
CFXAG5-7	7/16"	.323"	\$205.00	\$184.50	\$174.25	\$164.00
CFXAG6-8	1/2"	.385"	\$240.00	\$216.00	\$204.00	\$192.00
CFXAG8-10	5/8"	.510"	\$275.00	\$250.00	\$236.00	\$223.00

Flexelene™ Silver Material Properties

Hardness Shore A	Tensile Yield (MPa)	Ultimate Tensile Strength(MPa)	Minimum Operating Temp °F	Maximum Operating Temp °F	Flexural Modulus (MPa)	Vicat Softening Point
92	5.9	24.5	-40°	+170°	59.2	168°F