

AdvantaSil™ APSPG

PUMP GRADE SILICONE TUBING

Pharma & Biopharmaceutical Applications
PRODUCT DATASHEET



AdvantaSil APSPG (AdvantaPure Silicone Pump Grade) is a high-performance, platinum-cured silicone tubing designed for the most demanding peristaltic pump applications in the pharmaceutical and biopharmaceutical industries. Engineered for long-term durability, this translucent tubing provides excellent fluid visibility and consistent performance through repeated pump cycles. Its advanced formulation ensures reliable operation even under continuous compression and release, significantly outlasting standard silicone tubing.

Manufactured in compliance with stringent regulatory standards, AdvantaSil APSPG undergoes comprehensive testing to ensure high-quality performance. It complies with the industry specifications, including USP and ISO standards, and comes with a complete extractable report from BPOG (Biophorum Operations Group).

KEY FEATURES & BENEFITS

- Translucent for fluid flow visibility
- Special formulation offers long pump life
- Excellent flexibility
- General temperature range -50°F to 400°F (-45°C to 204.4°C)
- Custom lengths, sizes and packaging available
- Extruded, assembled, and packaged in an ISO Class 7 cleanroom
- Available as leak-proof, simple or complex, overmolded connections and tubing
- Smooth surfaces offer uniform fluid flow and resistance to bacteria build-up
- Manufacturing with a focus on sustainability
- Sterilizable by autoclave and gamma-irradiation
- Comprehensive [validation package](#) to expedite qualification and validation, including full extractables report (BPOG)

TYPICAL APPLICATIONS



Long pump life



Bioreactor process lines



Separation and purification



Chromatography



Liquid dispensing and filling



Cell culture and harvest



Media preparation



Filtration and fermentation



Ideal for use in assemblies and bags manifolds

PHYSICAL PROPERTIES

	ASTM Method	Value
Durometer, Shore A	D2240	50A
Specific Gravity	D792	1.12
Ultimate Tensile, psi	D412	1100
Ultimate Elongation, %	D412	450
Tensile Modulus @100%, psi	D412	200
Tear Strength, Die B, ppi	D624	100
Compression Set, %	D395B	30

CHEMICAL COMPATIBILITY

Acids, Dilute / Weak	Test Before Using
Acids, Strong / Concentrated	Test Before Using
Bases, Dilute / Weak	Acceptable
Bases, Strong / Concentrated	Test Before Using
Salts	Acceptable
High Purity Water	Test Before Using
Oil/Water Emulsion	Test Before Using
Alcohol	Test Before Using
Organic Solvent	Test Before Using

COMPLIANT OR TESTED TO

BPOG Extractables / Leachables
 USP <87> Cytotoxicity MEM Elution
 USP <88> Class VI
 USP <85> Bacterial Endotoxin
 European Pharmacopeia 3.1.9
 ISO 10993-3 (Ames Genotoxicity)
 RoHS Compliant
 ADCF Compliant

[Review the Regulatory Overview chart](#)

STERILITY

Available with validated sterility assurance of 10^{-6} via gamma irradiation per ISO 11137 method VDmax 25. A full sterility validation guide is available upon request.

STERILIZATION METHODS

Autoclave	One-time cycle at 121°C, 30 min
Gamma Irradiation	One-time up to 40 kGy

PRODUCT SPECIFICATIONS

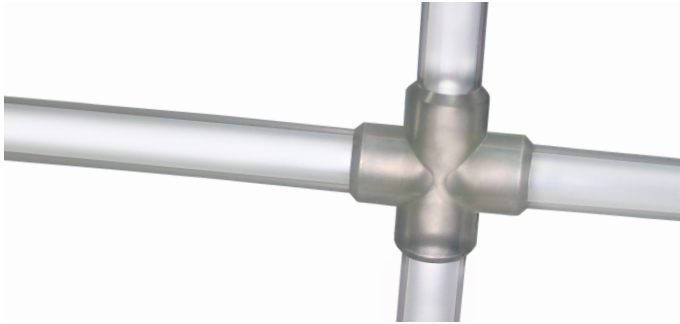
Part Number	I.D.		Wall		O.D.		Standard Length Available (ft.)
	in	mm	in	mm	in	mm	
APSPG-0031-0156	0.031	0.79	0.063	1.59	0.156	3.97	25
APSPG-0063-0188	0.063	1.59	0.063	1.59	0.188	4.76	25
APSPG-0125-0250	0.125	3.18	0.063	1.59	0.250	6.35	50
APSPG-0188-0313	0.188	4.76	0.063	1.59	0.313	7.94	50
APSPG-0250-0375	0.250	6.35	0.063	1.59	0.375	9.52	50
APSPG-0250-0438	0.250	6.35	0.094	2.38	0.438	11.11	50
APSPG-0250-0500	0.250	6.35	0.125	3.18	0.500	12.70	50
APSPG-0313-0500	0.313	7.94	0.094	2.38	0.500	12.70	50
APSPG-0375-0563	0.375	9.52	0.094	2.38	0.563	14.29	50
APSPG-0375-0625	0.375	9.52	0.125	3.18	0.625	15.88	50
APSPG-0500-0750	0.500	12.70	0.125	3.18	0.750	19.05	50

NOTE: Sold by standard coil length only. Add length suffix code to product number when ordering—see the Coil Length Legend at right for length suffix codes. Example: 25 ft. of .031 in. I.D. x .156 in. O.D. tubing is product number APSPG-0031-0156P. Non-listed sizes and custom lengths are available by special order.

Coil Length Legend:

P = 25 feet
L = 50 feet

Coils are supplied double bagged in heat-sealed polybags and bulk packed. Contact your AdvantaPure Sales Representative for other packaging options.



Overmolding - Connections and Assemblies

All AdvantaSil APSPG sizes can be integrated into our assemblies and manifolds. Choose standardly available wyes, tees, sanitary ends, intersections, and reducers, or opt for our custom overmolding design services to create custom pieces for your unique application.



Molded Tubing Ends

Ideal for aseptic transfer and processing, over-molded with multi-tube TC's and sanitary ends to form a smooth fluid path.



Bioreactor Tubing Kits

Built-to-order in an ISO Class 7 cleanroom, assembled with various components for convenience and efficiency.



Sterile Bottle Assemblies

Provide a ready-to-use, cost-effective solution for aseptic sampling, cell growth, and filling application. The robust molded closure design features a continuous flow path.



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To learn more about AdvantaPure and what solutions we offer visit:

[AdvantaPure.com](https://www.AdvantaPure.com)

The AdvantaPure line of fluid transfer systems for the biopharma and pharmaceutical market are a line of the NewAge Industries family of products and services.

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