

PUMPSIL TUBING

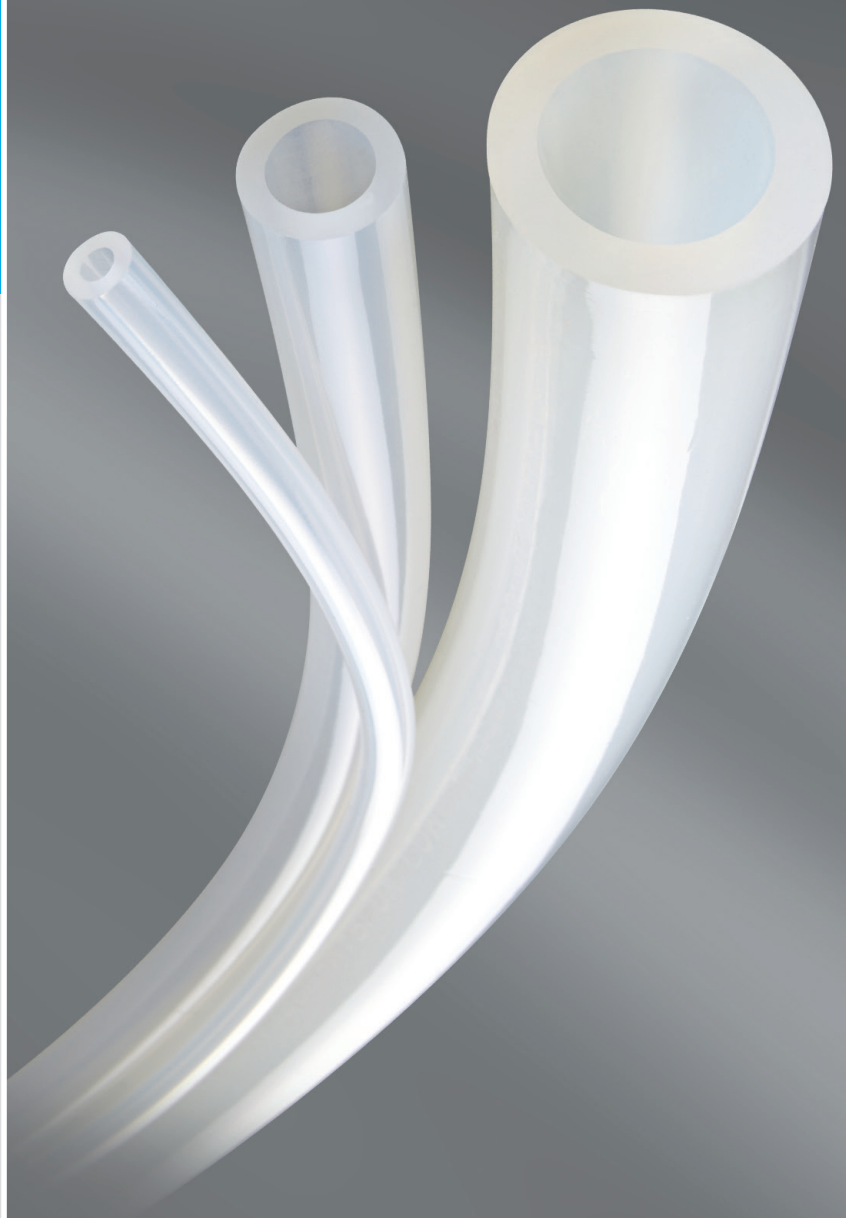
Platinum-cured silicone tubing

Ideal for:

Single-use biopharm applications. Accurate metering, transfer and filtration

Developed for the biopharmaceutical industry, Pumpsil is exceptionally pure tubing offering an ultra-smooth bore which helps minimise protein binding and ensures high purity in the finished product.

- Fully documented biocompatibility and comprehensive validation pack
- Absolute traceability with laser-etched part number, lot number and use-by date
- Excellent flow stability for accurate process control
- Comprehensive stock of a wide range of sizes
- Suitable for single-use applications



PUMPSIL TUBING

Pure platinum-cured silicone tubing

Pumpsil is widely used for single-use biopharm applications, as well as pH control and media feed in fermentation, accurate metering, transfer and filtration.

As well as continuous tubing, cut lengths and bulk reels, LoadSure elements operating up to 2bar are also available.

| Tube ordering codes | | | | | | |
|---------------------|------|------|------|--------------|--------------|--------------|
| Bore | | Wall | | Coil size | | |
| mm | inch | mm | inch | 15m/50ft | 5m/16ft | 152m/500ft |
| 0.5 | 1/50 | 1.6 | 1/16 | 913.A005.016 | 913.AJ05.016 | 913.B005.R16 |
| 0.8 | 1/32 | 1.6 | 1/16 | 913.A008.016 | 913.AJ08.016 | 913.B008.R16 |
| 1.2 | 3/64 | 1.6 | 1/16 | 913.A012.016 | 913.AJ12.016 | 913.B012.R16 |
| 1.6 | 3/32 | 1.6 | 1/16 | 913.A016.016 | 913.AJ16.016 | 913.B016.R16 |
| 2.4 | 1/16 | 1.6 | 1/16 | 913.A024.016 | 913.AJ24.016 | 913.B024.R16 |
| 3.2 | 1/8 | 1.6 | 1/16 | 913.A032.016 | 913.AJ32.016 | 913.B032.R16 |
| 4.8 | 3/16 | 1.6 | 1/16 | 913.A048.016 | 913.AJ48.016 | 913.B048.R16 |
| 6.4 | 1/4 | 1.6 | 1/16 | 913.A064.016 | 913.AJ64.016 | 913.B064.R16 |
| | | | | | | 122m/400ft |
| 8.0 | 5/16 | 1.6 | 1/16 | 913.A080.016 | 913.AJ80.016 | 913.B080.R16 |
| | | | | | | 152m/500ft |
| 0.5 | 1/50 | 2.4 | 3/32 | 913.A005.024 | 913.AJ05.024 | 913.B005.R24 |
| 0.8 | 1/32 | 2.4 | 3/32 | 913.A008.024 | 913.AJ08.024 | 913.B008.R24 |
| 1.6 | 1/16 | 2.4 | 3/32 | 913.A016.024 | 913.AJ16.024 | 903.0016.R24 |
| 3.2 | 1/8 | 2.4 | 3/32 | 913.A032.024 | 913.AJ32.024 | 903.0032.R24 |
| | | | | | | 122m/400ft |
| 4.8 | 3/16 | 2.4 | 3/32 | 913.A048.024 | 913.AJ48.024 | 903.0048.R24 |
| | | | | | | 91m/300ft |
| 6.4 | 1/4 | 2.4 | 3/32 | 913.A064.024 | 913.AJ64.024 | 913.B064.R24 |
| | | | | | | 61m/200ft |
| 8.0 | 5/16 | 2.4 | 3/32 | 913.A080.024 | 913.AJ80.024 | 913.B080.R24 |
| | | | | | | 46m/150ft |
| 9.6 | 3/8 | 2.4 | 3/32 | 913.A096.024 | 913.AJ96.024 | 913.B096.R24 |
| | | | | | 3m/10ft | 91m/300ft |
| 4.8 | 3/16 | 3.2 | 1/8 | 913.A048.032 | 913.A048.I32 | 913.B048.R32 |
| | | | | | | 61m/200ft |
| 6.4 | 1/4 | 3.2 | 1/8 | 913.A064.032 | 913.A064.I32 | 913.B064.R32 |
| | | | | | | 46m/150ft |
| 9.6 | 3/8 | 3.2 | 1/8 | 913.A096.032 | 913.A096.I32 | 913.B096.R32 |
| | | | | | | 30m/100ft |
| 12.7 | 1/2 | 3.2 | 1/8 | 913.A127.032 | 913.A127.I32 | 913.B127.R32 |
| 15.9 | 5/8 | 3.2 | 1/8 | 913.A159.032 | 913.A159.I32 | - |
| 8.0 | 5/16 | 4.0 | - | 913.A080.040 | 913.A080.I40 | - |
| 12.0 | - | 4.0 | - | 913.A120.040 | 913.A120.I40 | - |
| 16.0 | - | 4.0 | - | 913.A160.040 | 913.A160.I40 | - |
| 9.6 | 3/8 | 4.8 | 3/16 | 913.A096.048 | 913.A096.I48 | - |
| 12.7 | 1/2 | 4.8 | 3/16 | 913.A127.048 | 913.A127.I48 | - |
| 15.9 | 5/8 | 4.8 | 3/16 | 913.A159.048 | 913.A159.I48 | - |
| 19.0 | 3/4 | 4.8 | 3/16 | 913.A190.048 | 913.A190.I48 | - |
| 25.4 | 1 | 4.8 | 3/16 | 913.A254.048 | 913.A254.I48 | - |

| Pumpsil | Characteristics |
|---|--|
| Material | Platinum-cured silicone |
| Colour/transparency | Translucent |
| Spallation | Low |
| Life/hours | 313/314 pumpheads - 230 520R pumpheads - 200 620R pumpheads - 230 |
| Certification | USP Class VI, FDA regulations 21 CFR 177.2600 for contact with food. Eur.Ph. 6.5: 3.1.9 |
| Sterilisation methods | Gamma, autoclave, EtO |
| Operating temperature | -20C to 80C |
| Hardness, shore A (5sec) | 60 |
| Specific gravity | 1.16 |
| Tear B, ppi | 200-500 |
| Ultimate tensile strength psi | 1306 |
| Elongation at break % | 550 - 1500 |
| Tensile stress at 100% elongation, psi | 118 |
| Compression set, % | 5 - 42.5 |
| UV resistance | Excellent |
| Gas permeability rating O ₂ cc.cm x 10 ⁻⁸ /cm ² sec.atm | 400 |
| Gas permeability rating | Low |
| Water absorption | Low |

ASTM methods Hardness: ASTM D 2240; Specific gravity: ASTM D 792; Tear B, Ultimate tensile strength, Elongation at break, Tensile stress at 100% elongation; ASTM D 412

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Please state the product code when ordering pumps and tubing.

**WATSON
MARLOW
Tubing**

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