GORE™ High-Resilience Tubing Style 400 is a unique composite of expanded PTFE (ePTFE) and Viton® fluoroelastomer (FKM) that enables superior cost effectiveness in peristaltic pumping processes. The ePTFE multi-layer structure allows Style 400 tubing to maintain stable flow rate for thousands of hours while pumping aggressive media that often attack other tubing materials.

In this typical application, performance testing showed that Style 400 tubing lasted greater than 50 times longer than an extruded tube, with consistent flow throughout useful life.

**STANDS UP TO AGGRESSIVE CHEMICALS**

Style 400 tubing allows users to fully realize the benefits of peristaltic pumps and pinch valves for solvent-based processing. The Viton® fluoroelastomer used in making GORE™ High-Resilience Tubing Style 400 is resistant to a wide range of chemistries, including aromatic hydrocarbons, alcohols, including methanol, steam and concentrated acids.

Please contact a Gore Technical Service representative for assistance if you are considering use of the Style 400 tubing for pumping hydrocarbons with an active carbonyl group, such as ketones, esters and organic acids.

**KEY FEATURES**

- Provides greater security in challenging chemical processes
- Less swelling in chemical service
- Maintains consistent flow rate
- Exceptionally long pumping life
- Enables continuous high-pressure pumping

**KEY BENEFITS**

- Durable and dependable to reduce total costs
- Reliable metering of aggressive chemicals
- Increased process consistency
- Reduced maintenance and calibration, resulting in reduced downtime

**EXTRUDED VITON® VS GORE™ HIGH-RESILIENCE TUBING STYLE 400**

<table>
<thead>
<tr>
<th>Cycles</th>
<th>Extruded Tubing with Viton®</th>
<th>GORE™ High-Resilience Tubing Style 400</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2,000</td>
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<td>100%</td>
</tr>
<tr>
<td>15,000</td>
<td>60%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**EXTRUSION VS GORE™ HIGH-RESILIENCE TUBING STYLE 400**

- Pump: 2-roller, 90 rpm
- Fluid: Hydrocarbon Solvent
- Pressure: 20 psi

**KEY FEATURES**

- Provides greater security in challenging chemical processes
- Less swelling in chemical service
- Maintains consistent flow rate
- Exceptionally long pumping life
- Enables continuous high-pressure pumping

**KEY BENEFITS**

- Durable and dependable to reduce total costs
- Reliable metering of aggressive chemicals
- Increased process consistency
- Reduced maintenance and calibration, resulting in reduced downtime

The Most Durable and Dependable Fluoroelastomer Tubing
Protects Against Catastrophic Tube Failures

The expanded PTFE reinforcement of GORE™ High-Resilience Tubing Style 400 provides superior burst resistance compared to conventional non-reinforced extruded tubing, as high as 450 psi. That means far less worry about the environmental hazards and safety risk of unexpected tube ruptures in high-pressure filtration, transfer, and chemical dosing operations.

Chemical Compatibility

The elastomer used in Style 400 tubing is Viton® GF-600S, a peroxide-cured fluoroelastomer based on DuPont Performance Elastomers advanced polymer architecture. You can find a complete list of compatible and not-compatible chemistries for this elastomer under Viton®/F-type at this website:

http://www.dupontelastomers.com/Tech_info/chemical.asp

The broad chemical compatibility of Style 400 tubing enables use in a wide range of applications that includes pumping concentrated inorganic acids.

Product Configuration & Specifications

Technical Data

Material
Viton® fluoroelastomer and expanded PTFE

Temperature
32°F to 390°F (0°C to 200°C)

Operating Pressure
60 psi continuous, 100 psi intermittent

Size
Tubing ID ranges from 1.6mm to 19mm (1/16" to 3/4")
Wall thicknesses from 1.6mm to 6.4mm (1/16" to 1/4")
Length up to 685mm (27")

Further Information/Ordering

Detailed selection criteria, technical assistance, and installation guidelines are available from your local authorized distributor. Or, contact the application engineers at W. L. Gore & Associates, Inc., at 800-276-8451

For a complete listing of local sales offices please visit gore.com

North America
W.L. Gore & Associates Inc. (USA)
201 Airport Road
P.O. Box 1488
Elkton, MD 21922-1488, USA
Tel.: 410-392-3200
Fax: 410-506-8585

Industrial Applications

Style 400 tubes deliver significantly longer life in peristaltic pumps. At continuous pressures of 40-60 psi (3-4 bar), consistent flow rates are achieved throughout that long life. Combined with broad chemical compatibility, this enables the use of high performance peristaltic pumps in a wide range of applications. This can result in significantly reduced service costs and downtime in chemical dosing in a variety of industries, such as:

- Printing
- Water treatment
- Waste-water treatment
- Pulp & Paper
- Food & Beverage
- Fine chemicals

Supplied by:

All technical information and advice given here is based on our previous experiences and/or test results. We give this information to the best of our knowledge, but assume no legal responsibility. Customers are asked to check the suitability and usability in the specific application, since the performance of the product can only be judged when all necessary operating data are available. Specifications are subject to change without notice. Gore’s terms and conditions of sale apply to the purchase and sale of the product.