



Protect Light-Sensitive Fluids



UV-Resistant Acid Transfer Tubing

Versatility in Chemical Resistance

Ideal for virtually any permanent or temporary chemical transfer application, Versilon™ R-3400 tubing combines suppleness and flexibility with resistance to a wide range of chemicals. It shows exceptional resistance to strong acids and many alkalis. The flexibility of Versilon™ R-3400 tubing also makes it quick and easy to put into service, providing considerable savings on installation time and cost when compared to rigid piping systems.

Outstanding UV Resistance

Black in color, Versilon™ R-3400 is resistant to ultraviolet light, ozone and weathering, making it ideal for many outdoor applications. Standard inventoried sizes of Versilon™ R-3400 tubing have sufficient wall thickness to block transmission of all UV light.

Excellent Burn Resistance

Versilon™ R-3400 tubing meets UL 94 V-0 and UL 94 HB flammability ratings. Specifying Versilon™ R-3400 tubing for use in equipment that requires specific burn characteristics can help to simplify the approval process.

Features and Benefits

- black in color to protect light-sensitive fluids
- compatible with a wide range of chemicals
- Ozone resistant
- high temperature rating for excellent burn resistance
- low compression set to minimize permanent deformation
- available in clear formulation for fluid flow monitoring

Typical Applications

- Acid and caustic transfer
- Corrosive diffusible gases
- Fertilizer and pesticide dispensing
- Electrical insulation lines
- Ink and adhesive dispensing

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Versilon™ R-3400 Standard Sizes

| Part Number | ID | OD | Wall | Min. Bend Radius | Max. Working Pressure* 22°C (73°F) | Vacuum Rating at 22°C (73°F) |
|----------------|------------------|------------------|-----------------|------------------|---------------------------------------|---------------------------------|
| VS1,59UV3,18 | 1,59 mm (1/16") | 3,18 mm (1/8") | 0,79 mm (1/32") | 6,4 mm | bar (60 psi) | 760 mmHg |
| VS2,38UV3,97 | 2,38 mm (3/32") | 3,97 mm (5/32") | 0,79 mm (1/32") | 9,5 mm | bar (45 psi) | 760 mmHg |
| VS2,38UV5,56 | 2,38 mm (3/32") | 5,56 mm (7/32") | 1,59 mm (1/16") | 6,4 mm | bar (80 psi) | 760 mmHg |
| VS3,18UV6,35 | 3,18 mm (1/8") | 6,35 mm (1/4") | 1,59 mm (1/16") | 9,5 mm | bar (60 psi) | 760 mmHg |
| VS3,97UV7,14 | 3,97 mm (5/32") | 7,14 (9/32") | 1,59 mm (1/16") | 12,7 mm | bar (50 psi) | 760 mmHg |
| VS4,76UV6,35 | 4,76 mm (3/16") | 6,35 mm (1/4") | 0,79 mm (1/32") | 25,4 mm | bar (25 psi) | 279 mmHg |
| VS4,76UV7,94 | 4,76 mm (3/16") | 7,94 mm (5/16") | 1,59 mm (1/16") | 16,13 mm | bar (45 psi) | 760 mmHg |
| VS4,76UV9,53 | 4,76 mm (3/16") | 9,53 mm (3/8") | 2,38 mm (3/32") | 12,7 mm | bar (60 psi) | 760 mmHg |
| VS6,35UV9,53 | 6,35 mm (1/4") | 9,53 mm (3/8") | 1,59 mm (1/16") | 25,4 mm | bar (35 psi) | 635 mmHg |
| VS6,35UV11,11 | 6,35 mm (1/4") | 11,11 mm (7/16") | 2,38 mm (3/32") | 19,0 mm | bar (50 psi) | 760 mmHg |
| VS7,94UV11,11 | 7,94 mm (5/16") | 11,11 mm (7/16") | 1,59 mm (1/16") | 35,0 mm | bar (30 psi) | 406 mmHg |
| VS9,53UV12,7 | 9,53 mm (3/8") | 12,7 mm (1/2") | 1,59 mm (1/16") | 44,5 mm | bar (25 psi) | 279 mmHg |
| VS9,53UV15,88 | 9,53 mm (3/8") | 15,88 mm (5/8") | 3,18 mm (1/8") | 28,5 mm | bar (45 psi) | 760 mmHg |
| VS11,11UV14,29 | 11,11 mm (7/16") | 14,29 mm (9/16") | 1,59 mm (1/16") | 57,2 mm | bar (20 psi) | 203 mmHg |
| VS12,7UV19,05 | 12,7 mm (1/2") | 19,05 mm (3/4") | 3,18 mm (1/8") | 44,5 mm | bar (35 psi) | 635 mmHg |
| VS15,88UV22,23 | 15,88 mm (5/8") | 22,23 mm (7/8") | 3,18 mm (1/8") | 60,4 mm | bar (30 psi) | 406 mmHg |
| VS19,05UV25,4 | 19,05 mm (3/4") | 25,4 mm (1") | 3,18 mm (1/8") | 82,6 mm | bar (25 psi) | 279 mmHg |

*Working pressures are calculated at a 1:5 ratio relative to burst pressure using ASTM D1599

The values listed for working and burst pressures are derived from tests conducted under controlled laboratory conditions. Many factors will reduce the tubing's ability to withstand pressures, including temperature, chemical attack, stress, pulsation and the attachment to fittings. It is imperative that the user conduct tests simulating the conditions of the application prior to specifying the tubing for use.

Typical Physical Properties of Versilon™ R-3400 Tubing

| Property | ASTM Method | Value of Rating |
|---|------------------|-------------------------|
| Durometer Hardness | D2240-02 | 64° Shore A, 15s |
| Color | - | Black |
| Opacity | - | Opaque |
| Tensile Strength | D412-98 | 15,5 MPa (2250 psi) |
| Ultimate Elongation | D412-98 | 350% |
| Tear Resistance | D1004-94 | 32,0 kN/m (185 lb-f/in) |
| Specific Gravity | D792-00 | 1.31 |
| Tensile Stress @100% Elongation | D412-98 | 6,9 MPa (1000 psi) |
| Maximum Recommended Operating Temperature | - | 74 °C (165°F) |
| Brittleness by Impact Temperature | D746-98 | -21°C (-6°F) |
| Water Absorption, % 24 hrs. @ 23°C | D570-98 | 0.19 |
| Compression Set Constant Deflection @70°C for 22 hrs. | D395-02 Method B | 64 % |
| Tensile Set | D412-98 | 56% |
| Dielectric Strength | D149-97 | 19,3 kV/mm (490 v/mil) |

Unless otherwise noted, all tests were conducted at room temperature (73°F). Values shown were determined on 0.075" thick molded ASTM plaques or molded AST durometer buttons.

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