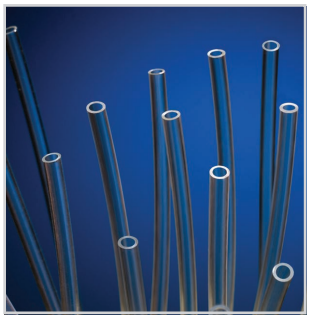
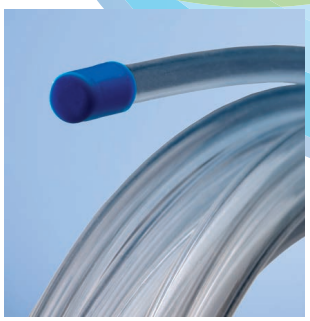
Fluid Handling

How do you ensure that your lab, semiconductor or food processing applications won't be contaminated by materials in transport? It's easy ... use plastics!

Applications

- Clinical and diagnostic — sampling, reagent transfer, dialysis, blood processing, washing
- Pharmaceutical industry
- Food processing and dispensing equipment
- Chemical process industry
- Semiconductor fabrication
- Ultra high purity fluid storage, transport, monitoring, control
- High performance liquid chromatography (HPLC) components
- Line tanks and transport vessels
- Manifolds, fittings, valves
- Municipal water and wastewater treatment
- Potable water treatment
- Pumps, valves
- Wafer carriers
- Industrial wastewater treatment
- Heat exchangers





Advantages May Include

- Low coefficient of friction
- High flexibility
- Outstanding temperature stability
- Chemical resistant
- Low gas and vapor permeability
- Corrosion resistance
- Smooth inner walls for a fluid flow path with no dead spots or crevices
- Meets high purity and high hygiene requirements
- Can be cleaned and sterilized using clean-in-place (CIP) or sanitize-in-place (SIP) methods
- Nonreactive with a wide variety of chemicals
- Does not contain impurities that can leach into the fluid stream
- Will not absorb contaminants
- Wide variety of pressure ratings
- Clarity — ability to monitor flow

Materials

- Acrylic (PMMA)
- Chlorinated Polyvinyl Chloride (CPVC)
- Ethylene-Chlorotrifluoroethylene (ECTFE)
- Fluorinated Ethlyene Propylene (FEP)
- Nylon (PA)
- Perfluoroalkoxy (PFA)
- Polyetheretherketone (PEEK)
- Polyethylene (PE)
- Polypropylene (PP)
- Polytetrafluoroethylene (PTFE)
- Polyurethane (PU/PUR)
- Polyvinyl Chloride (PVC)
- Polyvinylidene Fluoride (PVDF)

Did you know?

The original Hula Hoop was simply a hollow plastic tube; variations are made with ball bearings, bells or other noise makers inside the tube. While the toy itself could not be patented because of its ancient origins, the plastic used to make it is patented.

Environmental and Safety

Considering the total carbon footprint, including costs of raw materials, manufacture, transport, fabricate, install, maintain, plastics compare favorably with more traditional materials. Also, plastics are safer to handle and install. When you consider that most plastics are readily recyclable, they can become the most environmentally responsible and safest choice for many demanding fluid handling applications.

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