# Chemical

Chemicals easily eat through many materials, but they've met their match with plastics. The right plastics can ensure a safe, durable, long-lasting perforance even under the harshest conditions.

#### **Applications**

- Laboratory equipment
- Municipal water and wastewater industry piping
- Drain-waste-vent systems
- Fume hoods and ducting
- Pump and valve components
- Renal care facilities
- Pharmaceutical, biopharm and medical research
- High purity semiconductor industry
- HPLC tubing and valve components
- Lab countertops or other processing areas
- Chemical containers, storage or retention
- Plating tanks, barrels, parts
- Safety barriers, such as eye shields, face shields
- Pulp and paper bleaching
- Metals preparation and mining
  Fuel (underground transport and
- Fuel (underground transport and holding systems)
- Gaskets, seals and spacers
- Food, dairy and beverage
- Piping
- Tank and tanker linings
- Wall linings

#### Advantages May Include

- Corrosion resistant (broad spectrum chemical resistant)
- Low friction (ease of flow)
- Resistant to a wide range of temperatures
- Static dissipation
- Excellent strength-to-weight ratios
- Long lasting, durable
- Wide range of operating pressure/burst resistant
- Lightweight
- Able to color code to indicate contents



- FDA and USDA approved
- Easy to install
- Meets flammability standards
- Ease of fabrication (machined, welded and formed)
- High purity

### Materials

- Alpha-Nucleated PP-DWU Twin-Wall sheets (PP-HKP)
- Chlorinated Polyvinyl Chloride (CPVC)
- Ethylene-Tetrafluoroethylene (ECTFE)
- Fiberglass Reinforced Plastic (FRP)
- Flame Retardant Polypropylene (FR PP)
- Flourinated Ethylene Propylene (FEP)
- High-Density Polyethylene (HDPE)
- Nylon / Cast Nylon (PA)
- Perfluororalkoxy (PFA)
- Polyethylene (PE)
- Polyethylene, High Heat Resistant, UV stabilized (PE-HWU)
- Polypropylene Copolymer (CPP), Homopolymer (PPH)
- Polytetrafluoroethylene (PTFE)
- Polyvinyl Chloride (PVC)
- Polyvinylidene Fluoride (PVDF)
- Polyphenylene sulfide (PPS)
- Ultra-High Molecular Weight Polyethylene (UHMW-PE)

## Did you know?

Thermoplastics are available that are 100 percent inert to corrosive chemicals across the entire pH range, enabling processors and equipment manufacturers alike to avoid corrosion and contamination, while significantly cutting cost, weight and maintenance.





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 chemical applications.

