

# Plastics for Scientific, Analytical, and Process Control Instrumentation



## BENEFITS OF PLASTIC:

- Can operate in high and low temperatures
- Can perform in vacuum or high pressure environments
- Excellent electrical insulating properties
- Highly pure to minimize the likelihood of sample contamination
- Excellent wear resistance
- Resist degradation (from radiation, steam, chemicals)

## High performance materials to fulfill your needs

Curbell Plastics has materials to meet the demanding performance requirements of scientific, testing, and process control instrumentation. We know that materials used in instrumentation must perform well in extreme environments including corrosive chemicals, high and low temperatures, vacuum conditions, high pressure, and repeated sterilization.

Plastics are used for a wide range of scientific instrumentation applications including housings, guards, safety shields, structural parts, seals, electrical insulators, and bearing and wear components.

## Material selection, expert advice

*"Curbell worked with our designers to find a high temperature plastic with the right chemical resistance and sealing characteristics for our application. This helped us improve the operating performance of our instruments."*

– Curbell Customer Feedback

## TYPICAL APPLICATIONS:

- Accelerator components
- Bearings and bushings
- Centrifuge parts
- Cryogenic equipment components
- Electrical insulators
- Electrophoresis equipment parts
- Ferrules
- Flexible tubing
- Flow meters
- Fume hoods
- Glove boxes
- Guards and windows
- Housings
- HPLC machinery components
- Manifolds
- Mass spectrometer components
- Microfluidics components
- NMR (nuclear magnetic resonance) components
- Sample holders
- Sensor components
- Ultrasonic transducer parts
- Valve seats and seals

## COMMON MATERIALS:

- ABS
- Acetal
- Acrylic
- Dupont™ Vespel® Polyimide
- HDPE
- KYDEX® Thermoplastic Sheet
- Noryl®
- Nylon
- Optically-clear RTV silicone potting compounds
- PAI
- PBT
- PEEK
- PET
- PETG
- Polycarbonate
- Polypropylene
- Polysulfone
- PPS
- PTFE
- PVC
- PVDF (Kynar®)
- Radel® R
- UHMW
- Ultem®



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PLASTICS

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