Plastics for Semiconductor and Electronics Manufacturing

Benefits of Plastic:
• Static dissipative grades
• Chemical resistance
• Low particle generation in bearing and wear applications
• Low outgassing characteristics
• Low levels of extractables when placed in high purity chemicals
• High temperature capabilities
• Electrical insulating properties
• Dimensional stability

Engineering materials to fulfill your needs
Curbell Plastics has materials to meet the most demanding application requirements of the semiconductor industry. We know that materials must perform well in extreme environments including corrosive chemicals, vacuum conditions, high temperature, and extreme wear while maintaining purity and reliability.

Plastic materials are used for a wide range of semiconductor applications including chemical tanks, high temperature components, and static electricity control devices.

Material selection, expert advice
“Curbell worked with our designers to solve a difficult dimensional stability problem. They provided us with polymer materials that allowed us to maintain tight tolerances over a wide temperature range.”

~ Curbell Customer Feedback

TYPICAL APPLICATIONS:
• Bearings and bushings
• Chemical tanks
• Electrical insulators
• Flexible tubing
• Guards and shields
• Polishing rings
• Spin chucks
• Static control applications
• Test sockets
• Vacuum wand tips
• Valve components
• Wafer handling parts
• Wet benches and work stations

COMMON MATERIALS:
• Acetal
• Anti-static, static dissipative, and conductive plastics
• CPVC
• Dupont™ Vespel® polyimide shapes
• FEP
• Flametec™ Clean Room PVC-C
• Fluoropolymer tubing
• FR polypropylene
• Halar® ECTFE
• Kynar® PVDF
• Nylon
• PEEK
• PET
• PFA
• Polycarbonate
• Polyester films
• Polyimide tape
• Polypropylene
• Polysulfone
• PPS
• PTFE
• Polyamide-imide
• Soft RTV silicone potting gel
• Ultem®

www.curbellplastics.com
1.888.CURBELL (287-2355)
Engineering Materials
- ABS
- Acetal
- Acrylic
- CPVC
- Delrin®
- DuPont™ Vespel® Polyimide Shapes
- ESD materials
- ETFE
- FEP
- FM4910 materials
- Food grade materials
- FR-4
- G-10
- GPO - 1, 2, and 3
- Halar® (ECTFE)
- HDPE (high density polyethylene)
- HYD® 4101 (PBT)
- KYDEX® thermoplastic sheet
- Kynar® (PVDF)
- LDPE (low density polyethylene)
- Makrolon®
- Medical grade materials
- Metal detectable materials
- Noryl®
- NYLOIL®
- Nylon
- Nylon MD
- PBT
- PEEK
- PET
- PETG
- PEN
- PFA
- Phenolic
- Polyamide-imide
- Polycarbonate
- Polyethylene
- Polypropylene
- Polystone®
- Polystyrene
- Polysulfone
- PPS (polyphenylene sulfide)
- PTFE
- PVC
- PVDF
- RADEL® R
- SANATEC®
- SentryGlas®
- Sustain®
- SustafPEEK
- Sustain®
- TECAFORM®
- TECAMID®
- TECAPEEK®
- TECAST VEKTON™
- Thermoset laminates
- UHMW-PE
- Ultem® (PEI)
- Urethane
- X-ray detectable materials

Sign, Visual Merchandising, & Print Materials
- ABS
- Acrylic
- Acrylic, impact modified
- Acrylic mirror
- Acetate film and sheet
- Cast acrylic sheet
- CELTEC®
- Coroplast®
- Designboard®
- Dibond®
- Double patterned acrylic sheet
- DR-32 patterned acrylic sheet
- DURAPLAST®
- Dry erase board
- Engraving stock
- Ergonomic/anti-fatigue matting
- Expanded PVC
- FABBACK® mirror
- FiberMate™
- Flexible tubing
- Foam-CoR®
- Gatorfoam®
- Gatorplast®
- HDPE (high density polyethylene)
- HDU board
- HiPS film
- InSite®
- InteCell®
- InteClear™
- InteFoam®
- JetMount®
- KYDEX® thermoplastic sheet
- LDPE (low density polyethylene)
- Magnat board
- Makrolon®
- Mirror
- MUSTANG® Copolyester
- OPTIX®
- PETG
- Plastic lumber
- PLEXIGLAS®
- Polycarbonate sheet, mirror
- Polypropylene
- Polystyrene
- Precision Board Plus™
- PVC
- Rigid foams
- Ryno Board®
- See-thru mirror
- Simopar (light, color, digital)
- Sintra®
- Soft foams
- Solaaryl® SUVT (UV transmitting acrylic)
- Spectar®
- Styrene
- Twin wall polycarbonate sheet
- Ultra Board
- Urethane foam board
- Vinyl
- VIVAK® PETG

Plastic Films
- Acetate
- Acrylic
- Calendered vinyl
- Hardcoated film
- HDPE
- HIPS
- Kynar® PVDF
- LDPE
- Light diffusing film
- Makrolon® polycarbonate film
- Nylon
- PEEK
- PEN
- PETG
- Polycarbonate
- Polyamide
- Polypropylene
- Press polished vinyl
- Pressure sensitive vinyl
- PVC
- Scratch resistant vinyl
- Sign vinyl
- Static cling vinyl
- Styrene
- UHMW
- Ultem®
- Vinyl

Prototyping, Mold Making, & Tooling Materials
- DSM Somos® SLA resins
- Momentive silicone mold making materials
- PTFM&W liquid casting and laminating epoxies and casting urethanes
- RAMPE® modeling and tooling board

Adhesives & Sealants
- 3M™ adhesives and tapes
- Aerosols
- Anaerobics
- Bostik adhesives
- Bulk dispensing equipment and cartridges
- Cyanoacrylates
- Epoxies
- Hot melts
- IPS® SCIGrip®
- Methacrylates
- Momentive RTV silicones
- ITW Plexus® and ITW Devcon®
- Structural adhesives
- Urethanes
- Silane-terminated, isocyanate-free polyurethanes
- UV adhesives

Tapes, Fabrics, & Belts
- 3M™
- Adhesive marking tape
- Anti-static fiberglass fabric
- Application tape
- Band Sealing Belts
- Circuit board tape
- Crepe paper masking tape
- Differential adhesive tape
- Double sided tape
- Fiberglass cloth tape
- Fluorescent tape
- Foam Tape
- Friciton tape
- Gaffer’s tape
- Glow-in-the-dark tape
- Heat sealing tape
- HVOC Tape
- Magnetic tape
- Mechanical grade belts
- Metal foil tape
- Mounting tapes
- Mylar®/polyester tape
- Plating tape
- Polyester splicing tape
- Polymide tape
- PTFE coated fiberglass tapes, fabrics, and belts
- PTFE high modulus tape
- PTFE skived tape
- Reflective tape
- Tear/crease resistant fabrics
- Thermal spray tape
- Transfer tape
- UHMW wear tapes
- Ultra high bond tapes
- VHB® tape
- Vinyl tape
- Window glazing tape

Orthotic & Prosthetic Materials
- Covering and cushioning
- Fabrication supplies
- Foams
- Plastic sheet
- Prosthetic materials
- Transfer paper

OUR NATIONWIDE LOCATIONS OFFER:
- Local inventory
- Just-in-time delivery
- Cut-to-Size / Custom Cutting
- Packaging & Kitting
- Custom services
- Technical consult

Our material partners: