Testing Laboratory



PSN Labs is your full-service development partner.

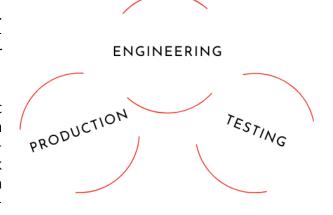


Our decades of experience in design and material sciences, combined with our injection molding and testing capabilities, uniquely position us to take your product to market with ease and confidence. Whether developing from scratch or looking to improve an existing product, we have the expertise to solve your most difficult design, material, manufacturing, or regulatory challenges.

Our biocompatibility team is best in class and will get your product to market, while meeting the needs of all regulatory bodies and under the standards of ISO 10993/18562/etc.

Our State-of-the-Art Testing Lab is fully equipped to support most standard and custom testing programs. We have an in-house machine shop to create test fixtures able to mimic the exact environment needed for the most accurate results.

PSN provides more than just data. Our unique, holistic approach ensures a sound analysis is completed from all angles. Our team of over 30 scientists and engineers from a number of different backgrounds work seamlessly across all three Labs to provide feedback on what the data means to the specific product, application, environment, and performance.



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Testing Capabilities

Analytical Testing

- Differential Scanning Calorimetry (DSC)
- DSC-OIT
- Fourier Transform Infrared Spectroscopy (FTIR)
- Inductively Coupled Plasma Mass Spectrometry (ICP-MS)
- Liquid Chromatography Mass Spectrometry (LC-MS)
- LC-MS/MS
- QTOF LC-MS
- · Gas Chromatography Mass Spectrometry (GC-MS)
- Nuclear Magnetic Resonance (NMR)
- Ultraviolet-Visible Spectroscopy (UV-Vis)
- SEM & SEM-EDS
- · Microscopy & Imaging
- Thermogravimetric Analysis (TGA)
- Thermomechanical Analysis (TMA)
- Finite Element Analysis (FEA)

Mechanical Testing

- Tensile & Flexural
- Compression
- Compression Set
- Shear
- Izod, Charpy, & Gardner Impact
- Falling Dart Impact
- · Tensile & Flexural Creep
- · Coefficient of Friction
- Tear Resistance
- · Adhesion Testing
- Bond Testing
- Wear Testing
- Coating Flexibility
- Fatigue Testing
- · Dynamic Mechanical Analysis (DMA)
- Creep & Stress Relaxation
- Chemical Compatibility



Biological/Regulatory Testing

- · Biocompatibility Testing (ISO 10993)
- Breathing Devices (ISO 18562)
- Extractables and Leachables (E&L)
- Volatile Organic Compounds (VOCs)
- · Particulate Matter
- · Cleaning and Disinfection Validation
- Coatings Testing
- · Toxicological Risk Assessment

Physical & Thermal Testing

- · Specific Gravity & Density
- Bulk Density
- Shrinkage
- · Dimensional Stability
- Hardness
- Ash Content
- Color Measurements
- Water Absorption & Adsorption
- Moisture Analysis
- Melt Flow Rate (MFR)
- · Capillary Rheometry
- · Brookfield Viscometry
- Salt Spray Exposure
- Vicat Softening Temperature
- Heat Deflection Temperature (HDT)
- Flammability (UL94)
- · Environmental Aging & Conditioning
- Life Estimation Testing (LET)
- · QUV Accelerated Weathering
- Environmental Stress Cracking Resistance (ESCR)

Material/sample acquisition, sample bar molding, sample preparation, and custom test fixtures are always available for any testing programs at PSN Labs.



www.psnlabs.com info@psnlabs.com