

PFOA/PFOS (Perfluorinated Alkyl Acid) Testing

United Science contract services offers a narrow range of specialized analytical services for measuring elution from and through polymeric materials.

Expertise

- 2D LC
- Membrane Permeability
- Analytical Methods Development
- Spectroscopy
- Custom On-line Instrumentation

Markets

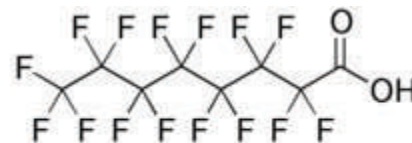
- Environmental
- Water Treatment
- Food Packaging
- Medical Combination Products
- Adhesives
- Automotive
- UV Inkjet
- Wood coatings
- Aerospace
- Composites
- Plastics

Compliance

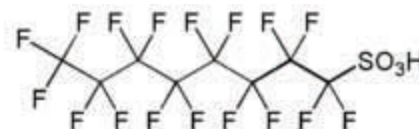
1. EPA Method 537
2. 2006/122/EC

Applications

1. Soils
2. Water samples
3. Polymers



Perfluorinated Octanoic Acid



Perfluorooctanesulfonic Acid

Analytical Instrumentation and Methods

- Soxhlet Extraction
- SPE Extraction
- SFC Extraction
- Microwave Extraction
- LCMS/MS w UV/Vis
- GC
 - MS
 - FID
 - TCD
- FTIR (ATR, DR)
- UV/Vis
- Gas Permeability

Custom Dedicated Spectroscopy & Systems

SEE Custom Spectroscopy Solutions for On-line Solutions

PFOA/PFOS

We have experience with LC/MS/MS methods related to elution of PFOA/PFOS from polymeric coatings. Our instrumentation is customized to eliminate background PFOA.

Services

1. Extraction
2. Sample Preparation
3. Method Development/Qualification
4. Method Transfer and Validation (GC to LC to Spectroscopy to On-line)



FCN 772 Coatings Degree of Cure Testing

United Science contract services offers a narrow range of specialized analytical services for measuring elution of contaminants, monomers, pigments, fillers from and through polymeric materials.

Expertise

- 2DLC
- Membrane Permeability
- Analytical Methods Development
- Application Specific Spectrometers
- Custom On-line Instrumentation

Markets

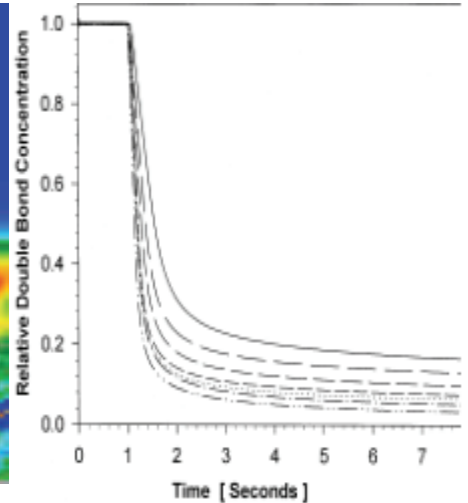
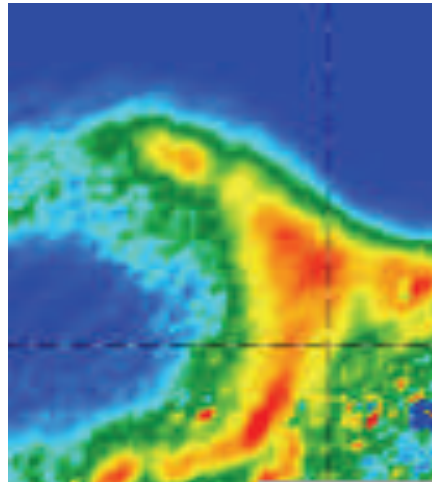
- Food Packaging
- Medical Combination Products
- Adhesives
- Automotive
- UV Inkjet
- Wood coatings
- Aerospace
- Composites
- Plastics

Compliance

1. FCN 772
2. FCNs
3. 21 CFR § 170– 189

Packaging

1. Cans, cardboard substrates
2. Films
3. Inks
4. Coatings



Analytical Instrumentation and Methods

- Soxhlet Extraction
- SPE Extraction
- SFC Extraction
- LCMS/MS w UV/Vis
- GC
 - MS
 - FID
 - TCD
 - Headspace
- FTIR (ATR, DR)
- UV/Vis
- Gas Permeability
- DO

Custom Dedicated Spectroscopy Systems

SEE Custom Spectroscopy Solutions for On-line Solutions

FCN 772 Degree of Cure Testing Services

1. Sampling
2. Elution Protocol for Food Types (1-9).
3. Method Transfer and Validation (GC to LC to Spectroscopy to on-line)
4. Food Additive Quantitation
 - MONOMER
 - Photoinitiator
 - Oligomer
 - Total Nonvolatile Extracts

United Science Corporation

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Combination Products Release Testing

United Science contract services offers a narrow range of specialized analytical services for measuring elution from and through polymeric materials.

Expertise

- 2D LC
- Polymer Permeability
- Analytical Methods Development
- Spectroscopy
- Custom Spectroscopy

Compliance

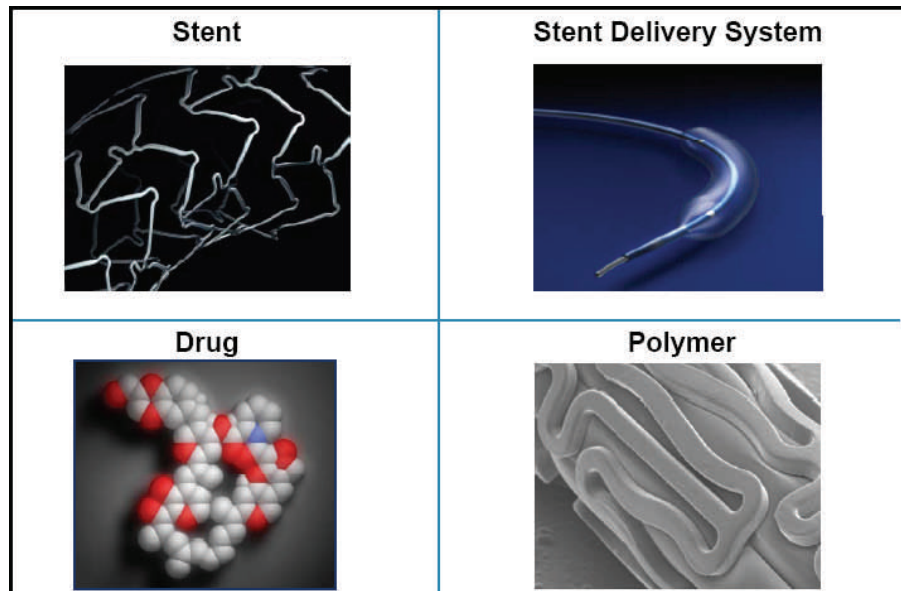
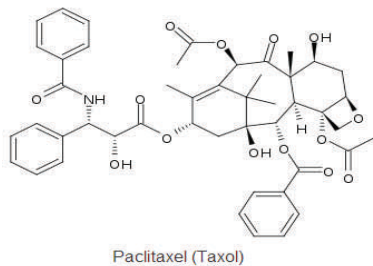
1. 510K
2. PMA Applications
3. ISO Methods
4. Production Testing

DES Systems

1. Transdermal Patches
2. Metered Dose Inhalers
3. Drug Infused Stents
4. Orthopedic Implantables

Tests

1. Drug distribution
2. Extractables/ Leachables
3. Drug Release
4. Drug/Polymer Interaction



Analytical Instrumentation and Methods

- Soxhlet Extraction
- SPE Extraction
- SFC Extraction
- LCMS/MS w UV/Vis
- GC
 - MS
 - FID
 - TCD
- FTIR (ATR, DR)
- UV/Vis
- Gas Permeability

Analytes

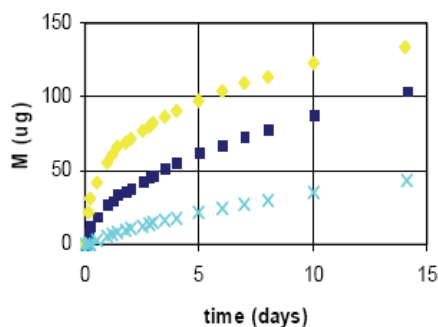
- Paclitaxal
- Rappamycin
- Zotarolimus
- Sirrolimus
- Biolimus
- Tacrolimus

Other analytical methods include:

- Excipients
- API
- Solvents
- Process Aids
- Drug Products

Services

1. Method Development/ Qualification
2. Method Transfer and Validation (GC to LC to Spectroscopy to On-line)
3. Sample Planning
4. Extraction and Stability Testing
5. Drug Elution Profiles





Some Patents are More Equal than Others

United Science business consulting services offers a narrow range of specialized & customized expertise for patent litigation, M&A due diligence, patent filing, patent management, competitive intelligence, and product comparison.

Expertise

- Patent Process Creation
- Patent Metrics & HR reward criteria
- Strategic Inventing
- Linking the Patent Process, Development Process, and Strategic Planning Process
- Patent Portfolio Valuation including ROI and NPV.
- Patent Searches
- Patent Portfolio Management
- R&D Tax Credit Activity
- Forecast & manage patent expenses

Patent Process

Are your patents customer relevant and do they add shareholder value?

- Business process for management of the patent process
- Claims narrowness vs. Exclusivity Assessment
- Three Go/No Go decision points.
- Preset decision making

Strategic Inventing

Do you have the right mix, number, and type of patents?

- Patent strategy formation based on product families
- Linking strategy, process, and operations
- Patent Roadmapping
- White Space Imaging
- Claim Iteration Robots
- Patent searches
- Claims analysis

Patent Valuation

Are you patenting the highest value claims?

- Calculate the NPV of a patent
- Track performance vs. forecast
- Calculate ROI for your current portfolio

Portfolio Management

Does your top management have visibility to your portfolio?

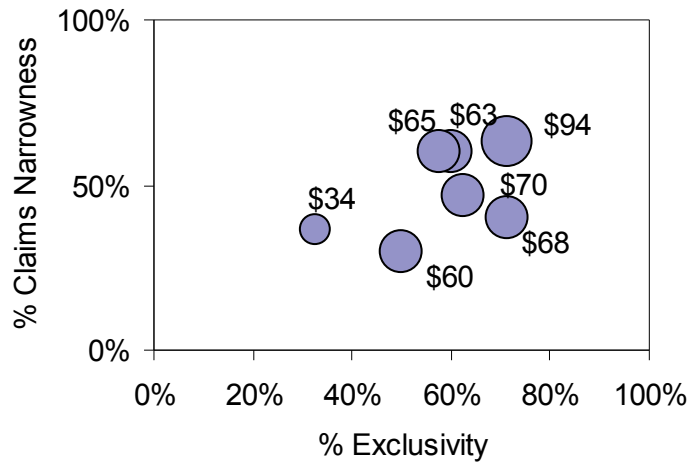
- 1 Page patent status reports
- 1 Page patent costs
- 1 Page patent forecast

Patent Litigation

- Literature Reviews
- Claim by claim product comparison data
- Unique apparatus
- Expert Witness Testimony
- Overnight Trial Support

Competitive Intelligence

- Product comparison for points of differentiation
- Patent and literature searches.
- Competitor lists & third party intelligence gathering.



You Got to Get The Data to Win

United Science contract technical services offers a narrow range of specialized & customized expertise for patent litigation, M&A due diligence, patent filing, product comparison, value selling, and technical data for product market launches.

Expertise

- Statistics
- Unique Apparatus Construction
- Unique experiments that show the technical advantage of a product
- Data mining & literature research
- Technical product presentations
- Value Selling
- Voice of Customer Research

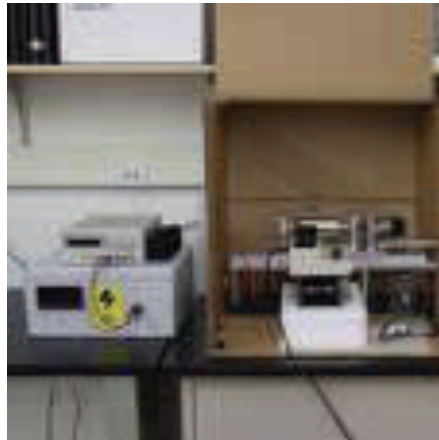
Patent Litigation

- Literature Reviews
- Claim by claim product comparison data
- Unique apparatus
- Expert Witness Testimony
- Trial Support
-

Patent Filing

- Patent / Technical Literature Searching
- Patent Specification Drafting

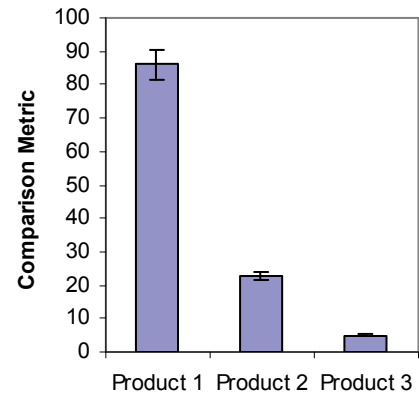
Unique Apparatus



Value Selling Support

- Feature, Benefit, Value clarification & documentation
- Design and conduct experiments to quantify value
- Plot the data in ways that communicate the value & are relevant to the customer
- Create compelling presentations that clearly communicate value
- Conjoint analysis based on technical data and customer input

Resulting Data



Market / Product Launch Data

- Gather data to show technical differentiation
- Data sheet development for products showing technical specifications and differentiation
- Technical data for Sales and Marcom activities
- Pre-launch end user assessments & studies

Competitive Intelligence

- Product comparison for points of differentiation
- Patent and literature searches.
- Competitor lists & third party intelligence gathering.
- Interviews of customers and end users.

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