



Analytical Services

Jordi Labs was founded in 1980 to provide the highest quality analytical services and polymer based HPLC columns and packing media in the industry. Our customers come from a diverse background, including the polymer, pharmaceutical and specialty chemical industries. It is our goal to help our customers overcome their analytical challenges by providing excellent products and personal assistance from our highly trained staff. Our reputation has been built on the principal of outstanding customer service, quick turnaround times and expert analysis for every job. Our capabilities and available techniques service a much larger customer base than just the polymer industry. We strive to work closely with all of our clients to solve any and all analytical problems.

Products

Jordi offers a full line of products to support the chromatography industry such as Gel Permeation Chromatography (GPC) columns, Solid Phase Extraction (SPE) products and Bulk Packing Material. We have developed and consistently provide the highest quality divinylbenzene polymer packing materials in the industry. The Jordi Columns, SPE products and Bulk Packing materials are made from highly crosslinked polymeric resins resulting in long column life, extreme durability in nearly any solvent, pH stability from 0-14, and high temperature tolerance to 150°C. Jordi also offers the widest selection of bonded phases and the most favorable pricing.

Problems We Solve

- Polymer Analysis
- Contract Analysis
- Preparative HPLC
- Product Formulation
- Unknown Identification
- Polymer Filler & Additives Quantitation
- HPLC Method Development
- Product Deformulation
- HPLC Training and Installation Services
- Expert Witnessing
- Good-Bad Comparisons
- Quantitative Analysis

Techniques We Offer

- Particle Analysis
- Light Microscopy
- Supplemental Testing
- Mass Spectroscopy (MS)
- Gas Chromatography (GC)
- Fourier Transform Infrared Spectroscopy (FTIR)
- Nuclear Magnetic Resonance (NMR)
- Chemical Methods (Titrimetry, Extractions, Etc.)
- Gel Permeation Chromatography (GPC)
- Thermal Methods (DSC, TGA, TMA)
- High Performance Liquid Chromatography (HPLC)
- Elemental Analysis (PIXE, INAA)

Products

Columns

- Gel Permeation Chromatography (GPC)
- Organic Solvent columns
- Aqueous Solvent Columns
- Reverse Phase (RP) & Normal Phase (NP)
- Ion Exchange
- Guard Columns

Solid Phase Extraction (SPE)

- Neutral Hydrophobic/Hydrophilic Balance
- Cation Exchange
- Anion Exchange

Bulk Media

Polymer Solubility Index for GPC Solvents

Polymer

Solvents

Abbreviations

| | |
|--|---|
| Acenaphthylene/MMA | THF, DMF |
| Acenaphthylene/styrene/acrylic | THF, DMF |
| Acetals | HFIP, DMAC |
| Acetylene (LMW) | TCB, Toluene |
| Alginate A | 1M NaOH in Water |
| Acrylamide | Water |
| Acrylamide/Acrylic Acid | Water/NaOAc, Water/KH ₂ PO ₄ , DMSO |
| Acrylics | THF, DMF, DMSO, Toluene |
| Acrylics(salts) | Water |
| Acrylic Acids | Water/NH ₄ AC+10% Methanol, 1M NaOH in Water |
| Acrylic/Butadiene/Styrene (ABS) | THF,DMF |
| Acrylonitrile | DMF |
| Acrylonitrile/Butadiene rubber (nitrile rubber) | DMF, Toluene, TCB |
| Acrylonitrile/Butadiene/Styrene | THF, DMF, DMSO |
| Acrylonitrile/styrene | THF |
| Acrylonitrile/vinyl chloride | DMSO |
| Alkyd Resins | THF, Toluene, Chloroform, DMAC |
| Alkyl Resins | THF, Chloroform |
| Alkyene Glycols | THF, Toluene, TBC, ODCB, Chloroform |
| Alkyene Oxide | Chloroform |
| Amides | DMF, HFIP |
| Amide/Imide | DMF, DMSO, DMAC |
| Amidoamine | HFIP |
| Amines | n-Butylamine |
| Amylose Acetate | THF |

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|--|
| THF=Tetrahydrofuran |
| DMF=Dimethylformamide |
| DMSO=Dimethylsulfoxide |
| HFIP=1,1,1,3,3,3-Hexafluoroisopropanol |
| TCB=1,2,3-Trichlorobenzene |
| ODCB=Ortho Dichlorobenzen |
| DMAC=Dimethylacetamide |
| NMP=N-Methyl Pyrrolidone |
| TFE=Trifluoroethanol |



Polymer

Solvents

| | |
|--|--|
| Amylose Butyrate | THF |
| Amylose Propionate | THF |
| Aromatic Anhydride Complex | Acetonitrile |
| Aromatic Polyamide (KEVLAR) | None |
| Asphalts | THF, DMF, Toluene, TCB, Chloroform, m-Cresol |
| Asphaltenes | THF, TCB |
| Butene-1 | Toluene, TCB, ODCB |
| Butyl Rubber (isobutylene/isoprene) | Toluene, TCB, ODCB |
| Butyl Methacrylate | DMF |
| BUNA-N (cured) | Toluene-limited |
| Butylene Terephthalate (PBT) | HFIP, m-Cresol |
| Butadiene (cis) | THF, Toluene, TBC, ODCB |
| Butadiene/Acrylic | DMF, Toluene |
| Butadiene/Acrylic Acid/Acrylonitrile | DMF, Toluene |
| Butyl Isocyanate | THF |
| Caprolactam | HFIP, m-Cresol |
| Carrageenan | 0.5 to 1M NaOH in Water |
| Carbonates | THF, TCB, ODCB |
| Carboxylated Polybutadiene | THF |
| Carboxylated SBR | DMF |
| Carboxy Methyl Cellulose | Water, DMF, 0.1 to 1.0M NaOH in Water |
| Carboxy Methyl Hydroxyethyl Cellulose | Water, DMF, DMSO |
| Carbowaxes | DMF, TCB, ODCB, Chloroform |
| Cellulose (Quarternary Amine modified) | Water, DMSO |
| Cellulose Acetate | THF, DMF, DMSO, Acetone/Water |
| Cellulose Esters (general) | THF |
| Cellulose Nitrate | THF, DMF |
| Cellulose Sulfate | 8:2 0.1M NaOH/DMSO |
| Cellulose Trinitrate | THF |
| Chitosan | 2% Acetic Acid in Water + 0.1M NaCl in Water |
| Chlorinated Polyethylene (Chloroprene) (Neoprene) | Toluene, TCB |



Polymer

Solvents

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|---|--|
| Chlorinated Rubber | Toluene, TCB |
| Coal Liquids | TCB |
| Coal Tar Pitches | Toluene, TCB |
| Cooking Oil(Soybean) | THF |
| Corn Syrup | Water, 8:2 Water /DMSO |
| Dextrans | Water, DMSO, 1N NaOH in Water |
| Dialkyl Phthalate | Toluene, TCB, ODCB, Chloroform |
| Dimethylsiloxanes | Toluene, TCB, ODCB, Chloroform |
| Dodecyl Acrylate | THF |
| Dioxalane | THF |
| Drying Oils | THF, DMF, Toluene, TCB, ODCB, Chloroform |
| Epichlorohydran | TCB |
| Epoxy Resins | THF, Toluene, Chloroform |
| Esters | THF, DMF, Toluene, TCB, HFIP, m-Cresol |
| Ethers | THF, DMF, Toluene, HFIP |
| Ether Ether Ketone (PEEK) | 3:1 Chloroform/Dichloroacetic Acid |
| Ether Sulfone | DMF, NMP |
| Ethyl Acrylates | DMF, Toluene, ODCB, HFIP, m-Cresol |
| Ethylene | TCB, ODCB |
| Ethylene/Acrylic Acid (Na+ Form) | TCB |
| Ethylene/Acrylic Acid (Zn+ Form) | Acidify with Glacial Acetic Acid, then TCB |
| Ethylene Glycol | Water, THF, DMF, DMAC |
| Ethyleneimine | 95:5 Water/Acetic Acid |
| Ethylene/n-hexane | TCB |
| Ethylene/Maleic Anhydride | DMSO |
| Ethylene/Methyl Acrylate | TCB |
| Ethylene Oxide | Ethylene Oxide |
| Ethylene Oxide/Butylene Terephthalate | HFIP |
| Ethylene/Propylene and EPR | TCB, ODCB |
| Ethylene/Propylene/Diamine (EPDM Rubber) | TCB |
| Ethylene Terephthalate (PET) | HFIP, m-Cresol |



Polymer

Solvents

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|--|--|
| Ethylene/ Vinyl Acetate (EVA) | TCB |
| Ethylvinyl Alcohol/Maleic Anhydride | DMSO |
| Fatty Acids | THF, TCB, ODCB, Chloroform |
| Fluoroelastomer | DMAC |
| Furfuryl Alcohol | THF, TCB, ODCB, Chloroform |
| Gelatins | Water, DMSO, 80:20 Water/DMSO+10% Butylamine |
| Gutta Percha (trans-1,4-isoprene) | Toluene, TCB, Chloroform |
| Glycerides | THF, TCB, ODCB |
| Glycol/Glycerine Polyesters | DMF, DMF + 0.005% LiBr |
| Glycols | Water, THF, DMF, Toluene, TCB, ODCB |
| Glyconates | HFIP |
| Glycolic Acid | HFIP |
| Gum Arabic | 8:2 0.1M NaOH in Water/DMSO |
| Hot Melt Adhesives | TCB |
| Hyaluronic Acid | 0.1N HN03, 1M NaOH/20% DMSO |
| Hydroxyethyl Cellulose | DMSO |
| Hydroxyethyl Methacrylate (HEMA) | Water, THF, DMF, Methanol |
| Hydroxyethyl Starch | DMSO |
| Hydroxypropyl Methyl Cellulose | DMSO |
| Isoprene (cis-1,4) (Natural Rubber) | THF |
| Isoprene (Trans-1,4) | Toluene, TCB |
| Isobornyl Methacrylate/Hydroxyethyl Methacrylate | THF |
| Isobutylene (Isobutene) | THF, Toluene, TCB |
| Isocyanates | THF, DMF, Toluene, Chloroform |
| Imides | DMF, DMAC |
| Imic Acid | NMP |
| Isopropylidene-1,4-phenylene | THF |
| KELVAR (Aromatic Polyamide) | None |
| KYNAR (Vinylidene Fluoride) | DMF, DMSO, DMAC, Cyclohexanone |
| KRATON Rubber | THF, TCB |
| (Styrene/Butadiene Elastomer) | |



Polymer

Solvents

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|--|--|
| Leucine/Methyl Glutamate | HFIP |
| Lignins | Water, THF, DMSO, 1M NaOH in Water |
| Lignin Sulfonates | Water, DMSO |
| Lipids | THF, Dichloromethane |
| Melamine Resin | THF, TCB, HFIP, m-Cresol, TFE |
| Methacrylates | THF, DMF, TCB |
| Methacrylic Acid | 8:2 0.1M NaOH in Water/DMSO |
| Methyl Cellulose | Water, DMSO |
| Methyl Methacrylate | THF, DMF, Toluene, HFIP, m-Cresol, DMAC |
| Methyl Methacrylate/Styrene | THF, Toluene, ODCB, Chloroform |
| Methyl Pentane | TCB |
| Methyl Vinyl Ether/Maleic Anhydride | 0.1 to 1.0M NaOH in Water |
| Methyl Siloxane | TCB |
| Napthalene Sulfonate/ Formaldehyde Condensate | Water, DMSO |
| Natural Rubber (Cis-1,4 Isoprene) | THF |
| Neoprene | Toluene, TCB |
| NORYL (Styrene/Phenylene Oxide) | TCB |
| Novolak (Phenol/formaldehyde resin) | THF with 2% Methanol, 75:25 Methanol/0.1M NaOH |
| Nylon 4,6,6/6,10,12, etc. | HFIP, m-Cresol |
| Octadecyl Methacrylate | DMF, DMSO |
| Octadecyl Vinyl Ether | THF |
| Oxycarbonyloxy-1,4-phenylene | THF |
| Oxyethylene (20) Sorbitan mono-oleate | DMSO |
| Oxymaleoyloxyhexamethylene | THF |
| Oxymethylene | HFIP, DMAC |
| Oxypropylene | THF |
| Oxysuccinyloxyhexamethylene | THF |
| Paper Pulp | Water, DMSO (HOT) |
| Phenol | DMF |
| Phenol/Formaldehyde Resins | THF, DMF, TCB, 1.0M NaOH/Methanol |



Polymer

Solvents

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| Phenolics (NOVOLAC) | THF, 95:5 THF/Methanol, Chloroform |
| Phenylene Oxide | TCB |
| Phenylene Sulfide | 1-Chloro Naphthalene @ 235 oC |
| Photo Resists | THF, DMF, m-Cresol |
| Pitch | TCB |
| Polyols | THF, DMF |
| Propylene | TCB, ODCB |
| Propylene/n-butene | TCB, ODCB |
| Propylene Oxide | TCB, ODCB, DMAC |
| Pullulan | 8:2 0.1M NaOH/DMSO |
| Rubbers(Chlorinated) (Neoprene) | Toluene, TCB |
| Rubbers (Uncured) | Toluene, TCB, ODCB |
| Saccharides | Water |
| Silicones | Toluene, TCB, ODCB, Chloroform, Dichloromethane |
| Siloxanes | Toluene, Chloroform |
| Starch | Water, DMSO |
| Styrene | THF, DMF, Toluene, TCB, ODCB, Chloroform |
| Styrene/Acrylonitrile | DMF |
| Styrene/Butadiene Rubber (SBR) (KRATON) | THF, Toluene, TCB, ODCB |
| Styrene/Butadiene Rubber (SBR) carboxylated | DMF |
| Styrene/Isoprene | THF, Toluene, TCB |
| Styrene/Maleic Anhydride | THF |
| Styrene/Monoethyl Maleate | THF |
| Styrene/Phenylene Oxide | TCB |
| Styrene Sulfonate | Water, DMSO |
| Succinamide | DMF |
| Sulfonates | THF |
| Sulfonated Styrene/Maleic Anhydride | 1M NaOH |
| Sulfone | THF, TCB |
| Sulfur/Dicyclopentadiene (SULPHLEX) | TCB |



Polymer

Solvents

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|---|---|
| Tetrafluoroethylene (TEFLON) | None |
| Trifluorostyrene | THF |
| Urea/Formaldehyde Resins | DMF, HFIP, m-Cresol |
| Urethane | THF, DMF, Toluene, HFIP, DMSO, Chloroform |
| Urethane (RIM) | m-Cresol extracts only! |
| Vinyl Acetate | THF, DMF, ODCB |
| Vinyl Acetate/Ethylene | DMF |
| Vinyl Acetate/Ethylene/Acrylate | DMF |
| Vinyl Acetate Phthalate | THF |
| Vinyl Alcohol | Water, THF, DMF, DMSO |
| Vinyl Alcohol/Vinyl Acetate | DMF, DMSO |
| Vinyl Bromide | THF |
| Vinyl Butyral | THF, DMF |
| Vinyl Carbazol | THF |
| Vinyl Chloride (PVC) | THF, Toluene |
| Vinyl Chloride/Vinyl Acetate/Maleic Acid | DMF |
| Vinyl Esters | THF, DMF |
| Vinyl Ferrocene | THF |
| Vinyl Fluoride | DMF |
| Vinyl Formal | THF |
| Vinylidene | DMAC |
| Vinylidene Fluoride (KYNAR) | DMF, DMSO, DMAC, NMP |
| Vinylidene Fluoride/Hexafluoropropylene (VITON) | THF, Toluene |
| Vinyl Methyl Ethers | THF, DMF |
| Vinyl Pyridine | 97:3 DMF/n-Butylamine |
| Vinyl Pyrrolidone | Water, DMF, DMSO, NMP |
| Vinyl Pyrrolidone/Vinyl Acetate | DMF, DMSO |
| Waxes (Parrafin) | THF, DMF, Toluene, TCB, ODCB, Chloroform |
| Waxes (Microcrystalline) | TCB, ODCB |