



# Justice Laboratory Software

A Division of Justice Innovations, Inc.

## Chrom Perfect Spirit™ Gel Permeation Chromatography

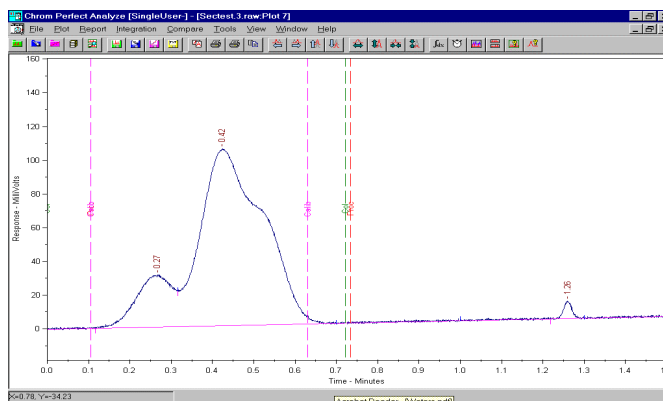
### 32 Bit SEC/GPC Viscosity Software For Windows

#### Accurate SEC/GPC Viscosity Software that is easy to use

For analytical and polymer chemists who need to effectively collect, manage, and report GPC data, **Chrom Perfect Spirit™** GPC/SEC software is a unique software application that utilizes all of the custom reporting and data analysis routines of the **Chrom Perfect Spirit™** Data system as well as providing features specific for managing your Size Exclusion Chromatography (SEC), and Gel Permeation Chromatography (GPC). **Chrom Perfect Spirit™** GPC/SEC software can provide the answers you need about your polymer.

Justice Laboratory Software does not limit the user to only the one or two types of detectors, users are free to select the best of breed.

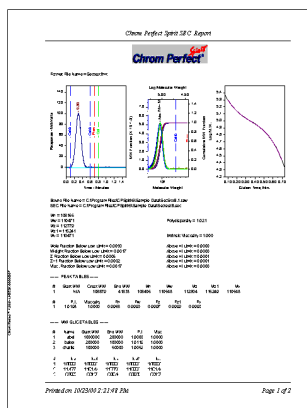
Designed to accommodate the broadest range of detectors you choose; RI, UV, or DVD can interface to **Chrom Perfect Spirit™**.



**Chrom Perfect®** makes it easy to review and edit baselines and integration parameters.

**Chrom Perfect Spirit™** GPC is the first and only data system that incorporates full ActiveX standards with full customization of reports and output formats.

The only system to give you complete control of report content without requiring the user to be bound to complex, expensive data base engines to get results, **Chrom Perfect Spirit™** makes it easy to export to your database or LIMS.

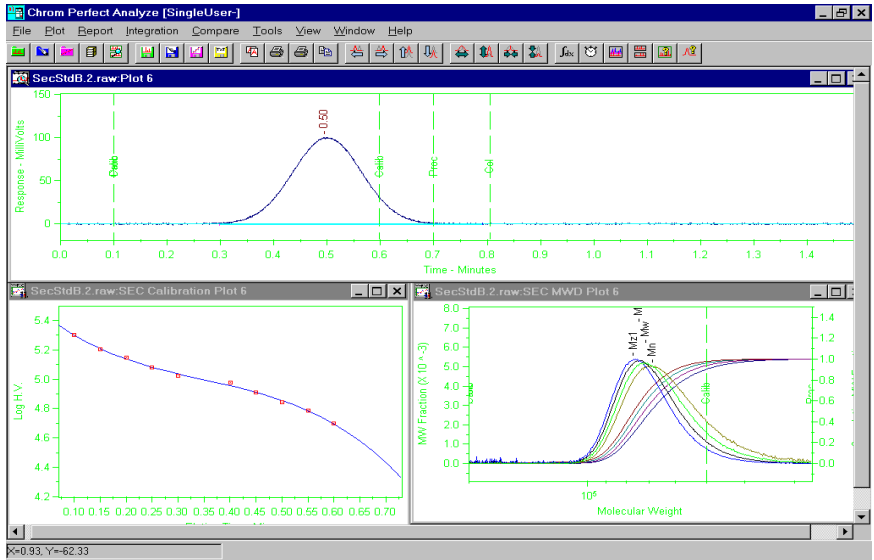


**Chrom Perfect Spirit™** contains the industry's most powerful report writer. It goes far beyond simplistic pasting of images and logos. ReportWrite Plus™ gives the user full control of the calculations needed for a complete laboratory report.

**Chrom Perfect Spirit™** offers a wide range of system configurations to meet the polymer chemist's needs. Available applications for 1 to 16 instruments per workstation, single user to enterprise-wide client server.

**Chrom Perfect Spirit™** supports multiple choices of data Acquisition ranging from internal 20 Bit A/D converters to the latest in external 24 Bit USB A/D solutions.

**Chrom Perfect Spirit™** GPC system's object based design and ActiveX compatibility allows easy connectivity to any other ActiveX application with standard VBA interfaces.



### Superior Graphics

Fully incorporated in the *Chrom Perfect Spirit™* CDS. *Chrom Perfect Spirit™* SEC Software is part of the *Chrom Perfect Spirit™* data system and is not an add-on third party application designed to process data from the CDS.

A powerful import engine allows data processing of files from most Chromatography data systems

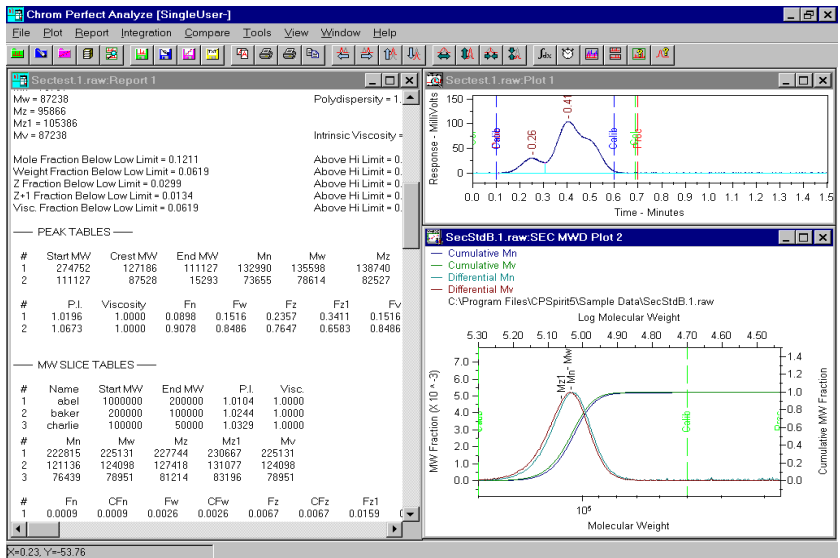
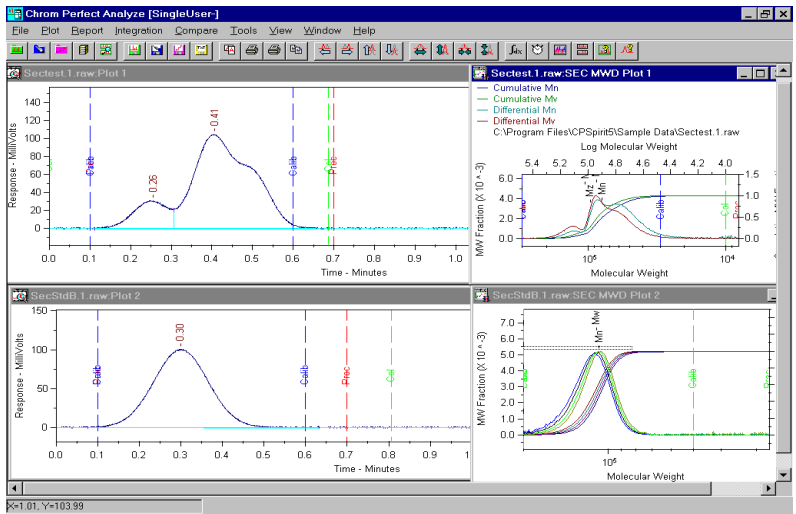
The easiest user interface available.

- \* Easy to understand.
- \* Easy to Customize.
- \* Easy to interface.

Online

- \* Full documentation.
- \* Help
- \* Calibration Validation.

Complete solution, no need to switch to another application for other HPLC/GC data acquisition and processing requirements.



- Unlimited reporting Capabilities.
- Any number of reports per analysis.
- Rapid Review of reports.
- Easy Data transfer of results.
- Highest Quality A/D available today.
- Easy LIMS interface.
- ISO certified developer.

## Detailed Features

### GPC/SEC

#### Data Acquisition

20 Bit Internal or 24 Bit external USB interface, requires **Chrom Perfect Spirit™ Version 5.**

#### Calibration Routines

- All with 1, 3, 5, and 7 degree fits.
- As many as 50 Point calibrations.
- Narrow Standards, Simple Molecular Weight.
- Narrow Standards, Mark Howinck Constants.
- Settable Alpha and Kappa for both standards and Samples.
- Narrow Standards Intrinsic Viscosity.
- Universal, with or without, Viscometer Light Scattering.
- Broad Standards Integral Methods.
- Broad Standards (Yau Method).
- Broad Standards Hamilec
- All with or without Axial correction
- Calibration Validation and error analysis

#### Peak Integration Features

- Automatic peak detection for narrow calibration standards.
- Automatic internal standard correction of flow rates.
- Fully Automated with reports in Real time and batch reprocessing.
- Any number of report format/molecular weight distributions using the same method, the same Integration limits, set by molecular weights, or interactively with the mouse. Multiple Reference Peaks and smoothing functions. Any number of Molecular weight markers for reporting Area %.
- Integration options include settable noise threshold.
- Settable baseline anchors: numeric or graphic.
- Negative peak processing.
- Negative peak conversion.
- Negative Peak clamping.
- Settable retention time and half height identification.
- Report MW fractions upper and lower limits.

### GPC Plot Options Include:

SEC Baseline Processing range, Column range, and Calibration Range.

SEC MWD Plot options include both differential and Cumulative Plots of:

- Number Fraction
- Weight Fraction
- Z Fraction
- (Z+1) Fraction
- Viscosity Fraction

#### Plots have markers for:

- Number Average MW (Mn)
- Weight Average MW (Mw)
- Z Average MW (Mz)
- (Z+1) Average MW (Mz1)
- Viscosity Average MW (Mv)

#### SEC Cal plot options include:

- Standard HV curve and points
- Standard MW curve and points
- Calculated Mn Curve
- Calculated Mw curve
- Calculated Mz curve
- Calculated Mv curve

#### Report output format

Formats include:

- ASCII selectable format
- CSV
- Single line tab or comma delimited
- Concatenated files
- Windows .emf (enhanced meta file)
- **Chrom Perfect Spirit™** ZED file including user customized calculations

## Choice of Thousands of Chemists Worldwide

The purchase of a Chromatography Data System, no matter how large or small, is considered an investment in the productivity of the laboratory. We recognize that this investment requires confidence in a company, its products, strategy, support and management.

Justice Laboratory Software offers the most comprehensive line of high technology software products for your Laboratory. From NT based client/server workstation chromatography systems to basic single user, Justice Laboratory Software meets the demanding needs of chromatographic applications.

Our products offer multi-vendor instrument interfacing, and distributed data processing for total integration of your lab.

**Chrom Perfect Spirit™** Data systems do not require non standard hardware, or data acquisition servers and are compliant to all Microsoft 32 bit ActiveX and COM and Controls.

## PC Requirements:

Operating System **Windows 98, NT 4.0 SP3** and higher, or **Windows 2000**.

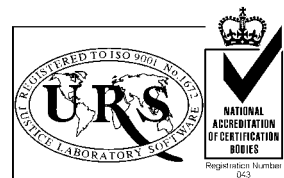
Processor	Pentium <sup>®</sup> III, Celeron™, Athlon™, or Duron™ @ 500MHz or higher.
RAM Memory	128 MB
Cache RAM	256 KB minimum
CD-ROM/DVD	16X or higher
Video Accelerator	2X AGP or PCI or higher.
Monitor	17" FST 0.28mm dot pitch
Floppy	1.44MB 3.5"
Ports Mouse, Keyboard	2 Serial, 2 USB, 1 Parallel,

Justice Laboratory Software invites you to compare **Chrom Perfect Spirit™** with any other data system available today. Find out about our dedication to customer service and support. Review our consistent record of providing our customers with a significant revision **every year since 1989**.

The leading independent ISO certified developer of Chromatography data systems.

### Ordering Information

40-5000-0000	<b>Chrom Perfect Spirit™</b> Version 5.0 32-Bit Software Suite	
40-1000-1202	Two Channel Data Acquisition	One or Two Instruments
40-1000-1404	Four Channel Data Acquisition	One to Four Instruments
40-5006-0000	<b>Chrom Perfect Spirit™</b> 32-Bit GPC /SECV <sup>3</sup> software option	



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