SEDEX LT-ELSD™

Low Temperature - Evaporative Light Scattering Detectors

THE RESULT OF 25 YEARS OF EVOLUTION

SEDEX *LC*

FOR QUALITY CONTROL AND EDUCATIONAL LABORATORIES

SEDEXLT-ELSD™

Low Temperature
Evaporative Light-Scattering Detectors

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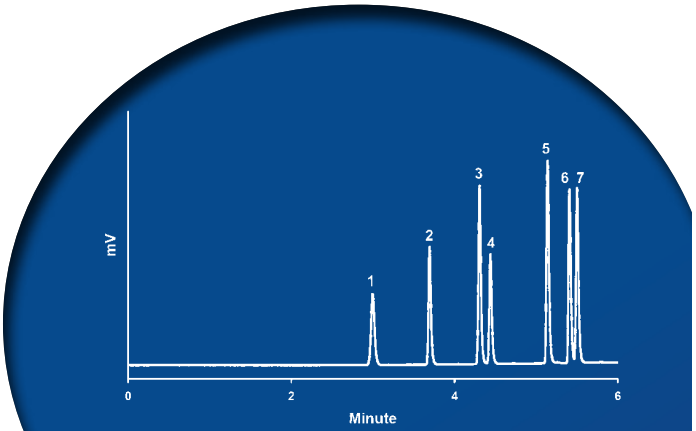
SEDERE

SENSITIVITY
FLEXIBILITY
EXPERIENCE

SEDEX *LC* FOR QUALITY CONTROL AND EDUCATIONAL LABORATORIES

SEDEX Model LC Evaporative Light-Scattering Detector for **HPLC** allows for the detection of essentially all compounds: detection is based on a universal property of all analytes and does not require the presence of a chromophoric group, electroactive group, etc. SEDEX Model LC combines sensitivity, reliability, and accuracy for your analyses, thanks to unrivalled SEDEX technology. This detector presents a new design and a number of outstanding innovations providing the best optical and electronic benefits at a very competitive price. SEDEX Model LC can be connected to any HPLC equipment, and you can control the detector locally or via a PC for a fully integrated system thanks to our range of SEDEX drivers. A remote shut down mode is also provided to minimize cost and enhance system lifetime. Full SOP protocols are provided for GLP compliance and validation procedures.



Chromatogram of four terpenic lactones and three flavonoids by HPLC/ELSD

1 - Bilobalide, 2 - Ginkgolide C, 3 - Ginkgolide A, 4 - Ginkgolide B, 5 - Quercetin, 6 - Isorhamnetin, 7 - Kaempferol

Features and Benefits:

- Optimizes sensitivity of non-volatile, thermally labile and semi-volatile compounds.
- Minimized band broadening thanks to a dedicated SEDEX LC HPLC nebulizer and an innovative cell design. This nebulizer covers the flow rate range from 200µL/min to 2mL/min and can be easily mounted and dismounted.
- With **SAGA** (SEDEX Automated Gain Adjustment), an innovative gain control available when it is driver-controlled by software, SEDEX LC automatically adapts the gain setting to avoid any off-scale saturation of the detector.
- Complete Remote Control: the gas, heater, photodiode and light source can be automatically shut off at the end of a series of analyses.

Typical Application: Natural Products

Many natural products such as herbal drugs are gaining more and more interest in the pharmaceutical and nutraceutical industry because they contain bioactive compounds. Some of these compounds such as saponins and terpenes do not possess any chromophore and therefore cannot be analyzed in HPLC using a UV detector. Only SEDEX ELSD can detect chromophoric and non-chromophoric molecules in a single gradient HPLC analysis with an excellent sensitivity, thanks to SEDEX technology. The following example shows a method for a quick and simultaneous determination of terpenic lactones and flavonoids in Ginkgo Biloba.

TECHNICAL SPECIFICATIONS

COMPONENTS	
Detection	Photodiode
Light Source	Blue LED Elapsed Time Counter
Temperature Range	Ambient to 100°C
Nebulizer	LC
Eluent Flow Rate	200µL/min to 2mL/min
Typical Sensitivity	5ng
DATA	
Analog Output	0 - 1 Volt
Gain Settings	1 to 7
Filter	Dedicated Numerical Algorithm
Signal Amplification	SAGA (SEDEX Automated Gain Adjustment)
Data Rate	40Hz
COMMUNICATION	
Selection & Display	OLED Display and Keypad
Events	Contact Closure, TTL for Ready, Autozero
Power-down Methods	Shut-off: Gas, Light Source, Heating and/or Photodiode Cleaning Mode
Computer Interface	USB, RS-232
Software	Drivers (option)
EXTERNAL REQUIREMENTS	
Power	100V to 240V (50Hz/60Hz)
Gas Supply	Nitrogen or Air 3.5bar (less than 3L/min)
Dimensions	250mm (10in) W 330mm (13in) H 530mm (21in) D
Weight	15kg (33lb)

SEDERE is committed to user satisfaction with every SEDEX detector, and provides you with:

- A Worldwide distribution network at your service.
- On-site installation and training.
- Full SOP (Standard Operating Procedures) including IQ, OQ, PQ.
- Technical and applications support.
- Web-access to applications in many fields.
- User seminars, on and off-site.
- Flexible service contract options.
- Easy-to-order spare parts and accessories.