

AMINO
ACIDS

PHOSPHOLIPIDS

PHARMACEUTICALS

NUTRACEUTICALS

COMBINATORIAL LIBRARIES

FATTY
ACIDS

LIPIDS

SURFACTANTS

TRIGLYCERIDES

CARBOHYDRATES

POLYMERS

New! ELSD 2000ES

From the Leader in Evaporative Light Scattering Detection

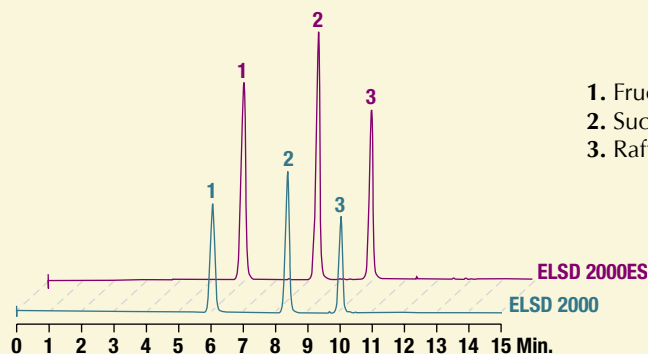


Now the most advanced ELSD available is more sensitive!

- **The Only ELSD with Two Operating Modes** – Get optimum performance for all applications
- **More Sensitive** – Now even lower detection limits
- **Universal** – Detect compounds missed by other detectors
- **Advanced Features** – Increase productivity and decrease downtime
- **Low Temperature Operation** – Detect semi-volatile compounds

The ELSD 2000ES has all the benefits of the ELSD 2000 plus even greater sensitivity. The optical and electronic components have been redesigned to minimize background noise and increase sensitivity.

The ELSD 2000ES Increases Sensitivity for Equal Concentrations of Carbohydrates



Column: Prevail™ Carbohydrate ES, 5µm, 150 x 4.6mm (Part No. 35102)
Mobile Phase: A: Water B: Acetonitrile
Gradient:

Time:	0	10	11	14
%B:	80	50	80	80

Flow Rate: 1.0mL/min

Experience the benefits of increased sensitivity today!

Call 1-800-255-8324 and ask for a quote
or a free product demonstration in your lab.



The ELSD 2000ES has been designed and manufactured in accordance with the following standards: EN6101-1 + A2:95, EN555011: 1998, FCC CFR 47 Part 15: 2001, EN 61326: 1998, EN 6100-3-2: 1995 + A14:2000 and EN61000-3-3: 1995

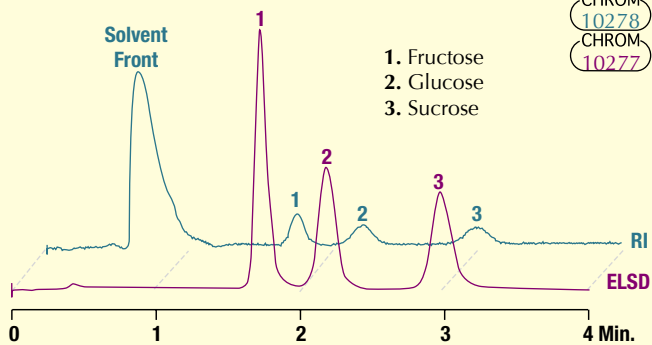
Alltech

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UNP M105

Use the **ELSD 2000ES** to replace or complement information from your existing detectors

Replace **RI** with **ELSD** for better sensitivity, fast equilibration, and gradient capability

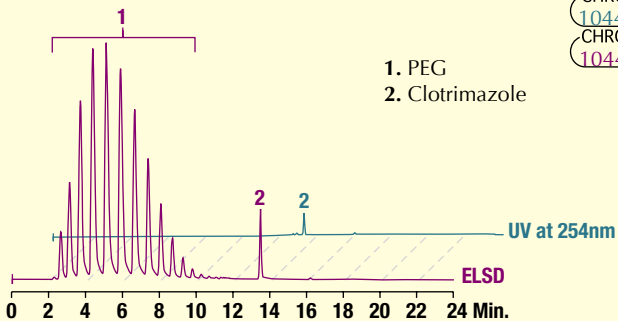


CHROM
10278
CHROM
10277

1. Fructose
2. Glucose
3. Sucrose

Column: Prevail™ Carbohydrate ES, 5µm, 53 x 7mm Rocket™ (Part No. 35104)
Mobile Phase: Acetonitrile:Water (75:25)
Flow Rate: 2.0mL/min

ELSD shows what may be missing from your **UV** Chromatogram



CHROM
10446
CHROM
10447

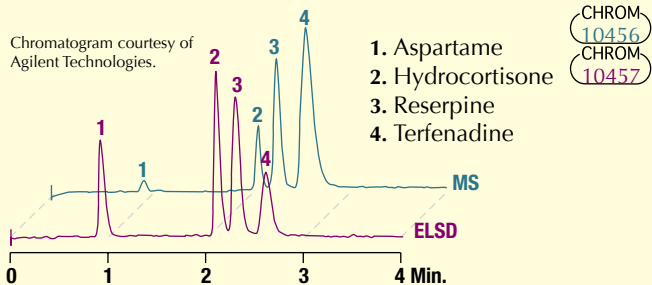
1. PEG
2. Clotrimazole

Column: Alltima™ C18, 5µm, 150 x 4.6mm (Part No. 88052)
Mobile Phase: A: Water to pH 7 w/Acetic Acid B: Methanol
Gradient:

Time:	0	8	10	20	25
%B:	30	50	100	100	30

Flow Rate: 1.0mL/min

Use **ELSD** in parallel with **MS** to obtain both structural and concentration information



CHROM
10456
CHROM
10457

1. Aspartame
2. Hydrocortisone
3. Reserpine
4. Terfenadine

Column: ZORBAX® StableBond C18, 3.5µm, 50 x 4.6mm (Part No. 835975-902)
Mobile Phase: A: 0.025% Formic Acid in Water B: 0.025% Formic Acid in Acetonitrile
Gradient:

Time:	0	1	5	5.1
%B:	25	70	70	25

Flow Rate: 1.0mL/min

Easy to Use

Method parameters can be programmed and viewed on the menu-driven front panel or through PC-based control software. Up to 10 methods can be stored and recalled for fast set-up. Self-diagnostic tests automate troubleshooting and verify detector functions on start-up.

Instrument Qualification (IQ/OQ/PQ) Services

The ELSD 2000ES is thoroughly tested before shipment and calibration and performance documents are included with each instrument. Installation and familiarization is available, as well as comprehensive onsite IQ, OQ, and PQ services performed by a certified Alltech representative.

ELSD 2000ES Specifications

Light Source:	Laser diode with collimating optics, 670nm, max output less than 8.5mW, class IIIB
Detector Element:	Silicon photodiode
Temperature Range:	Ambient to 120°C in 1°C increments
Nebulizer Gas:	Nitrogen preferred; Calibrated to 4.0L/min
Inlet Pressure:	60-80psig
Typical Operating Range:	1.0-3.0L/min
Flow Control:	Digital mass flow control
Mobile Phase Flow Rate:	To 5.0mL/min
Analog Output:	1V or 10mV full scale
Communications:	<i>Inputs:</i> TTL/contact closure for auto zero and gas shutoff <i>Outputs:</i> Contact closure for pump shutdown in error conditions
User Interface:	Graphical LCD with alphanumeric keypad and/or Windows® based PC control via serial I/O
Power Requirements:	120/240V, 50/60Hz
Dimensions:	23.0" H x 12.5" W x 21.6" D (58.4cm H x 31.8cm W x 54.8cm D)

ELSD 2000ES

DESCRIPTION	PART NO.
120V	600100ES
240V	600200ES

INSTRUMENT SERVICES

QUALIFICATION SERVICES	PART NO.
IQ/OQ performed by Alltech	Q60010ES
PQ performed by Alltech	Q60020ES
IQ/OQ/PQ performed by Alltech	Q60030ES
IQ/OQ Documentation	Q60041ES
PQ Documentation	Q60042ES
IQ/OQ/PQ Documentation	Q60043ES
Re-OQ performed by Alltech	Q60040ES