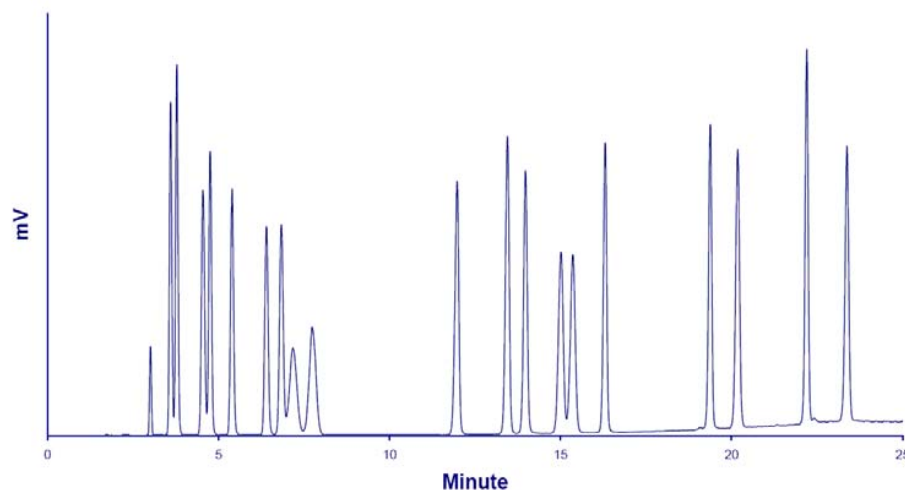


Generic HPLC/LT-ELSD Method for Carbohydrates



Chromatogram of the Simultaneous HPLC/LT-ELSD Analysis of Polyols, Mono-, Di- and Oligosaccharides.

Standard mixture: 20 Compounds (see Table next slide)

Injection volume: 2 μ L

Column: Imtakt UK-Amino (3 μ m, 3.0 x 250mm), 60°C

Flowrate: 0.7mL/min

Eluent: A: H₂O - B: ACN

Gradient: 0-6 minutes: 10%A, 6-20 minutes: from 10%A to 25%A, 20-25 minutes: 25%A

Detector: SEDEX 90LT, 28°C, 3.5Bar

SEDEX LT-ELSD: S90 Applications



Generic HPLC/LT-ELSD Method for Carbohydrates

	RT	%RSD (n=6)		LOD (S/N=3)
	Minutes	RT	Response	ng (o.c.)
1 - Glycerol	3.05	0.07	4.1	145*
2 - Rhamnose	3.65	0.04	2.0	22.9
3 - Erythritol	3.85	0.05	1.2	11.7
4 - Arabinose	4.63	0.06	2.7	20.0
5 - Xylose	4.79	0.06	1.7	20.0
6 - Fructose	5.51	0.06	3.1	15.4
7 - Sorbitol	6.57	0.03	1.0	23.1
8 - Mannose	6.99	0.04	0.4	20.0
9 - Galactose	7.37	0.18	2.5	35.3
10 - Glucose	7.93	0.12	2.1	28.6
11 - Inositol	12.25	0.05	1.0	8.6
12 - Sucrose	13.66	0.06	1.7	5.1
13 - Maltulose	14.19	0.04	1.7	7.1
14 - Lactose	15.23	0.06	1.5	6.2
15 - Maltose	15.54	0.04	1.4	6.5
16 - Trehalose	16.49	0.05	1.8	34.5
17 - Raffinose	19.54	0.04	3.4	33.7
18 - Maltotriose	20.30	0.04	0.6	38.7
19 - Nystose	22.28	0.03	1.4	30.9
20 - Maltotetraose	23.45	0.03	0.7	34.9

* Semi-volatile compound