Rtx®-5MS

The *Rtx"-5MS - True LOW BLEED LEADER!*

spectrometers. The automatic gain control feature of these instruments will significantly reduce sensitivity as column bleed increases during temperature programming. Using low bleed Rtx"-5MS columns will result in increased sensitivity of ion trap GC/MS systems. If a column continues to contribute high bleed, it may result in source contamination. A contaminated source should be cleaned, which may take up to a full day, resulting in lost manpower and valuable instrument time. Because each Rtx"-5MS column is thoroughly tested for low bleed, it is the column of choice for the prevention of these problems.

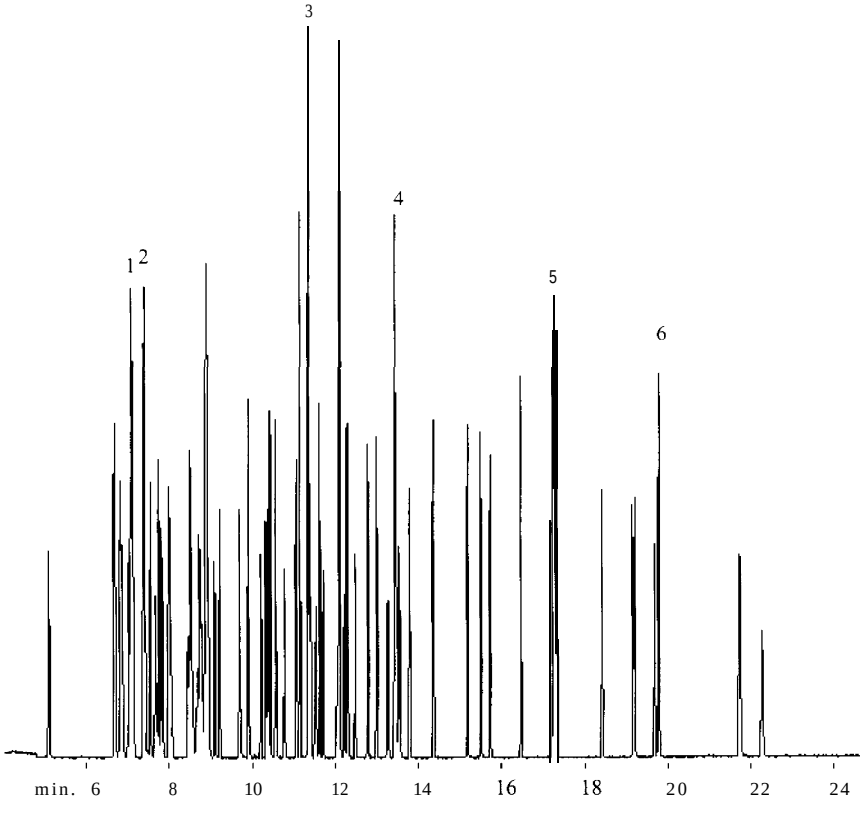
TABLE I: Rtx"-5MS demonstrates better response of active environmental compounds.

Components	Rtx"-5MS	DB-5MS	HP-5MS
n-nitroso-di-n-propylamine	0.30	0.28	0.25
2,4-dinitrophenol	0.62	0.53	0.52
4-nitrophenol	0.83	0.82	0.76
4-nitroaniline	0.93	0.69	0.80
pentachlorophenol	1.38	1.30	1.34

Inertness

Low bleed levels are important, but inertness is also a critical factor when choosing a capillary column for GC/MS analysis. How do active environmental compounds respond on the Rtx@-SMS compared to other "MS" columns? A 14 component test mixture containing five highly active compounds was injected onto each of the three "MS" columns. The results of

FIGURE 2: The Rtx"-5MS **GUARD** column shows excellent inertness and low bleed for the analysis of semi-volatile pollutants without increasing analysis time.



30m. 0.25mm ID. 0.25um Rtx"-5MS Integra-Guard (cat.# 12623-124) 2.0u1 injection of Semi-Volatile Calibration mix. Concentration: 20ng/ul.

Oven temp.: 45°C (hold 3.5 min.) to 95°C @ 40C/min.. to 295°C @ 17C/min. (hold 2 min.), to 320°C @ 40C/min. **(hold 5.9** min.).
Inj/Det. temp.: 250/310C
Linear velocity: 32cm/sec. @ 40°C
Scan rate: 0.8 sec./scan
Scan range: 35-500amu
Flow rate: 1.03ml/min. after EPC **pressure** pulse
Ionization: EI
Electron range: 70eV
Splitless hold time: 0.95 min.

Internal Standards:
1. **1,4-dichlorobenzene-d4**
2. **naphthalene-d8**
3. **acenaphthene-dl0**
4. **phenanthrene-d10**
5. **chrysene-d12**
6. **perylene-d12**

Analysis courtesy of lnchcape Testing Services - Aquatec Laboratories, Burlington, Vermont. Image file courtesy Thru-Put Systems, Inc.