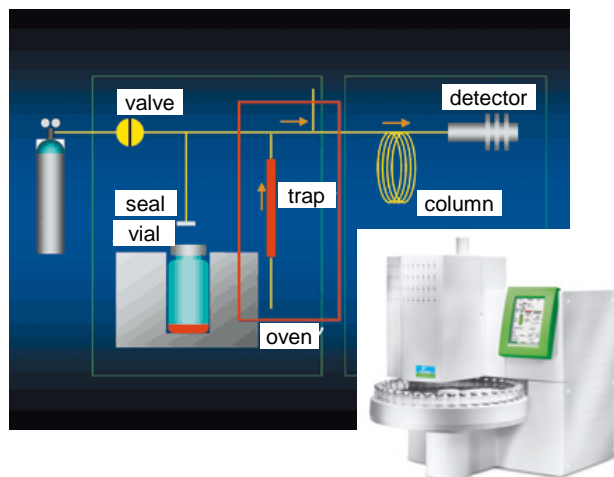


Automated Headspace Sampler with built-in Trap

Low boiling point organic compounds (C2~)
can be analyzed with high sensitivity !



<http://www.perkinelmer.co.jp/chrom/tabid/662/Default.aspx>

Fig. 1 Features of the analyzing system

< Application >

Analysis of

- thermal desorption gases from plastics
- source of fragrance and scent
- impurities in solvents
- VOCs contained in water samples, etc.

< Basic operation >

The sample is sealed into the vial. The desorption gases from the sample in the vial flow into the trap tube and concentrated. Finally the desorbed analytes are carried into the GC column for separation.

< Specification >

- ① Temperature : 40~210°C
- ② Sample size : Max. 10mm dia., 50mm height
- ③ Detection range : Typically C2~C12
- ④ Detection limit : 10ng (on butane standard)

< Comparison of HS and HS-Trap >

Conc. in the Headspace : 100 ppm

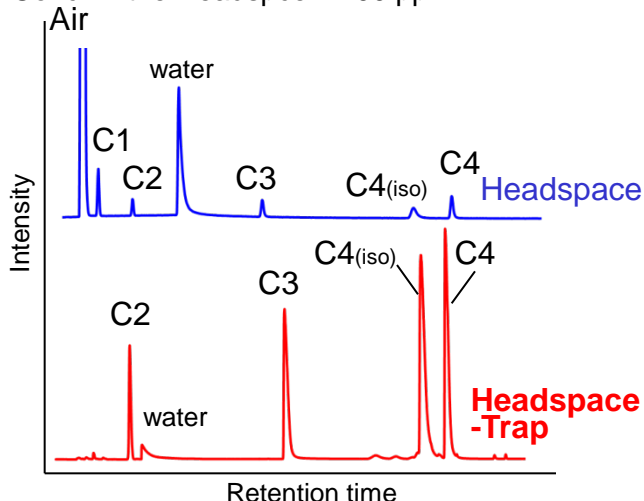


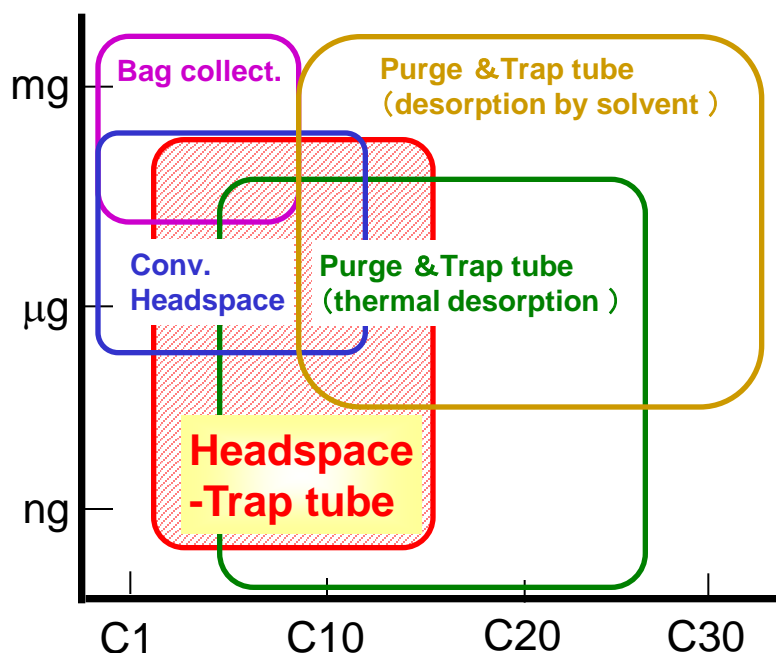
Fig. 2 GC/MS Total Ion Chromatogram

Table 1 S/N ratio in HS and HS-trap

Compound	HS	HS-trap
Ethane (C2)	110	940
Propane (C3)	110	1300
Butane (C4)	110	2700

Sensitivity is 10 times higher !

Anal. tech. and appl. map to VOC (C1~C30)



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