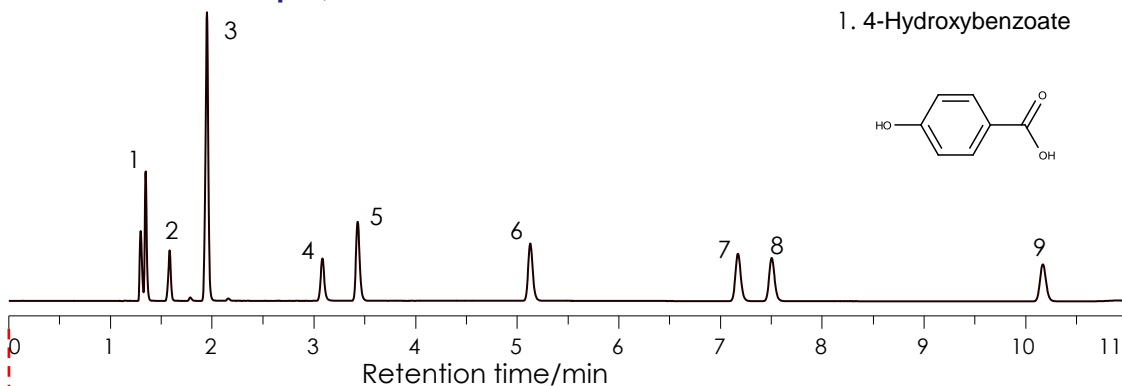


## 食品添加物の分離

### Food additives

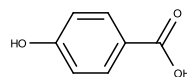
SunShell C18 2.6 μm, 150 x 4.6 mm i.d.



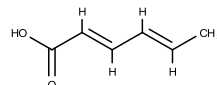
SunShell C18 2.6 μm, 150 x 4.6 mm i.d.

SunShell C18 2 μm, 100 x 2.1 mm i.d.

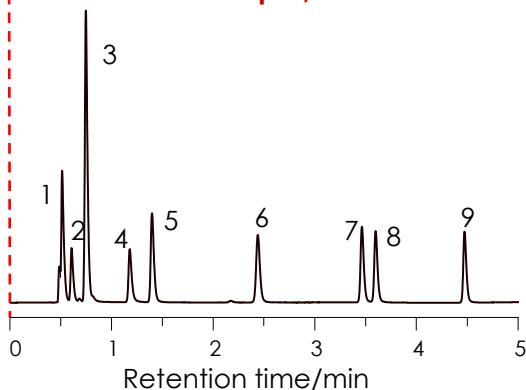
1. 4-Hydroxybenzoate



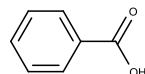
2. Sorbic acid



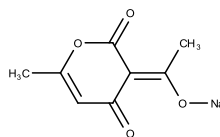
SunShell C18 2 μm, 100 x 2.1 mm i.d.



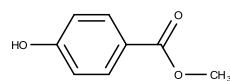
3. Benzoic acid



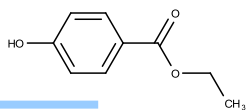
4. Dehydroacetic acid Na



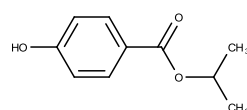
5. Methyl 4-hydroxybenzoate



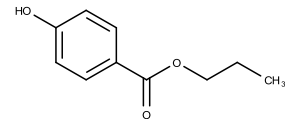
6. Ethyl 4-hydroxybenzoate



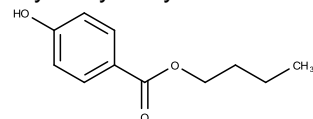
7. Isopropyl 4-hydroxybenzoate



8. Propyl 4-hydroxybenzoate



9. Butyl 4-hydroxybenzoate



Mobile phase: A) 20 mM Ammonium formate pH4.9

B) Acetonitrile

Time (min)	0	10	12
%B (2.6 μm, 150 x 4.6 mm i.d.)	30	50	30

Time (min)	0	5	6
%B (2 μm, 100 x 2.1 mm i.d.)	30	80	30

Flow rate : 1.0 mL / min (2.6 μm, 150 x 4.6 mm i.d.)

: 0.4 mL / min (2 μm, 100 x 2.1 mm i.d.)

Temperature : 40 °C

Pressure : 21.0MPa (2.6 μm, 150 x 4.6 mm i.d.)

: 44.3MPa (2 μm, 100 x 2.1 mm i.d.)

Detection : UV@240 nm

SunShell C18カラムを使用する事で良好な分離を得られました。

圧力は上がってしまいますが、2μmカラムを使用する事で測定サイクルを1/2にする事が出来ます。また、流速も1/2以下になるため、使用する移動相は1/4以下になります。

Instrument

Hitachi Chromaster®

Detector: 5410

Oven: 5310

AutoSampler: 5260

Pump: 5160

