

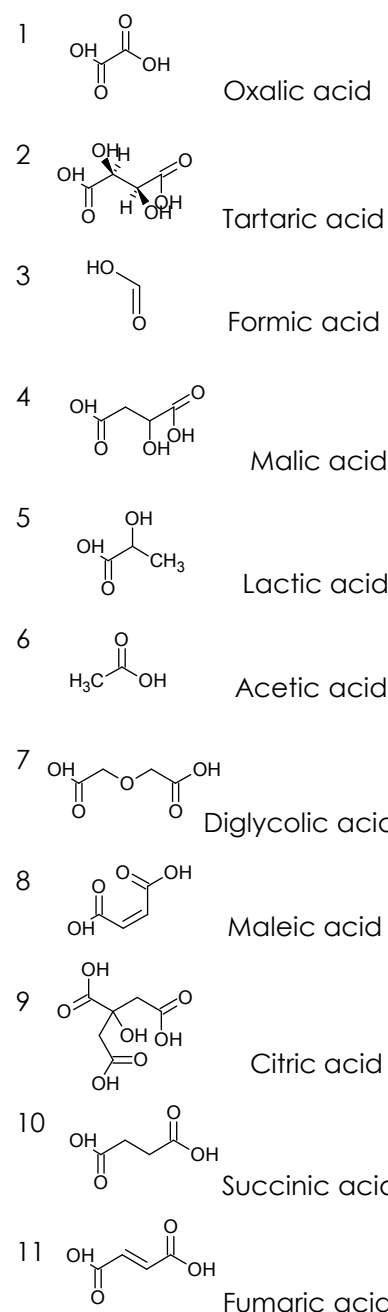
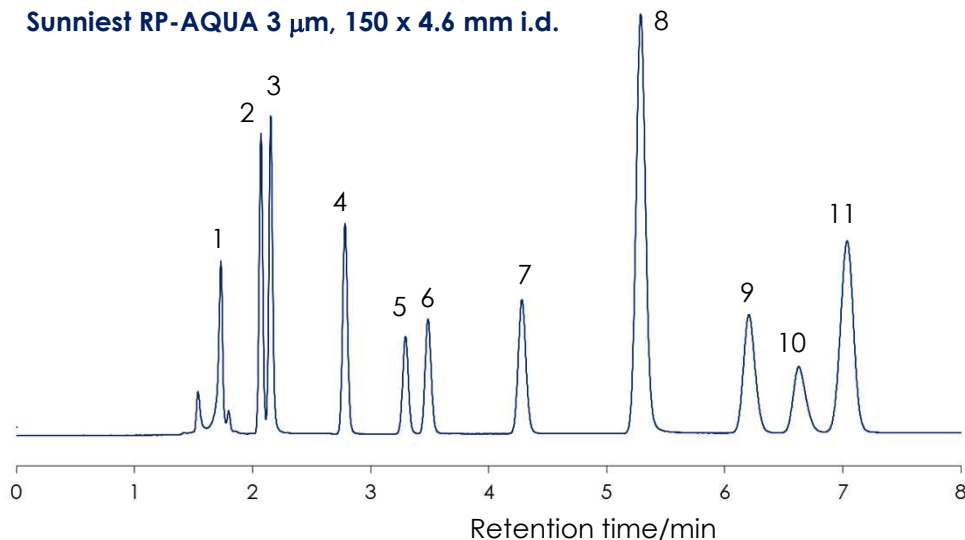
有機酸の分離 (1)

Organic acids (1)

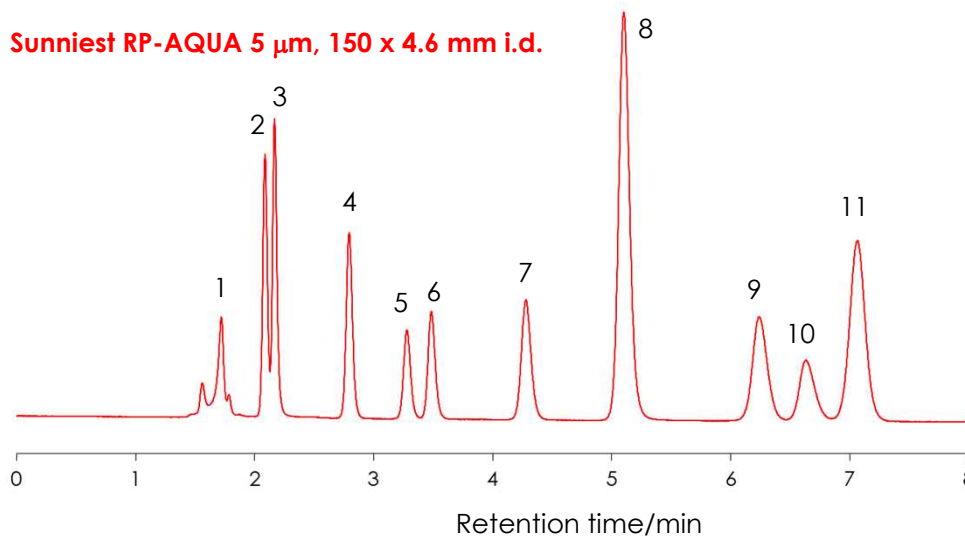
Sunniest RP-AQUA 3 μ m, 150 x 4.6 mm i.d.

Sunniest RP-AQUA 5 μ m, 150 x 4.6 mm i.d.

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Sunniest RP-AQUA 5 μ m, 150 x 4.6 mm i.d.



Column: Sunniest RP-AQUA, 3 μ m and 5 μ m, 150 x 4.6 mm

Mobile phase: 0.025 M KH₂PO₄, pH2.5

Flow rate: 1.0 mL/min

Column pressure: 14 MPa for 3 μ m and 5 MPa for 5 μ m

Temperature: 25 °C

Detection: UV@210nm (Semi-micro flow cell)

Injection volume: 3 μ L

Sample: 1 = Oxalic acid (60 ppm), 2 = Tartaric acid (500 ppm), 3 = Formic acid (1000 ppm),

4 = Malic acid (1000 ppm), 5 = Lactic acid (1000 ppm), 6 = Acetic acid (1000 ppm),

7 = Diglycolic acid (1000 ppm), 8 = Maleic acid (100 ppm), 9 = Citric acid (1000 ppm),

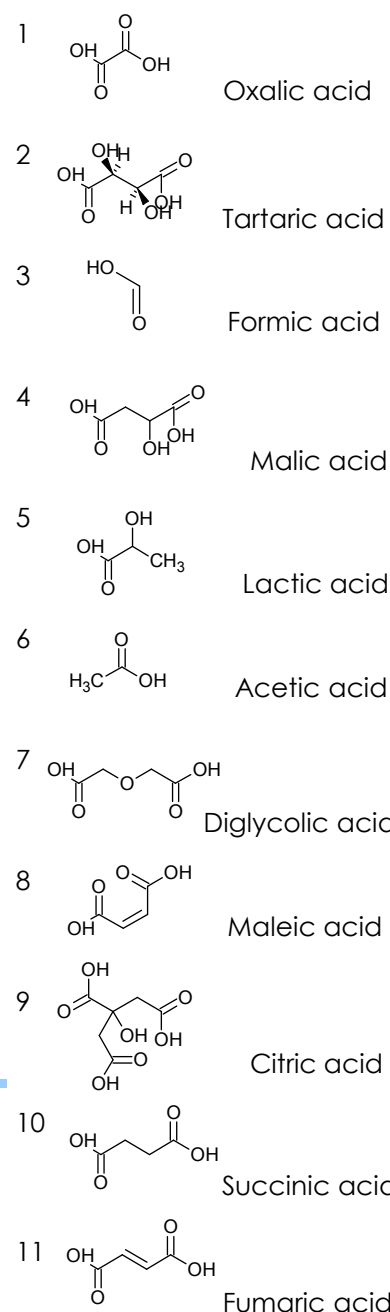
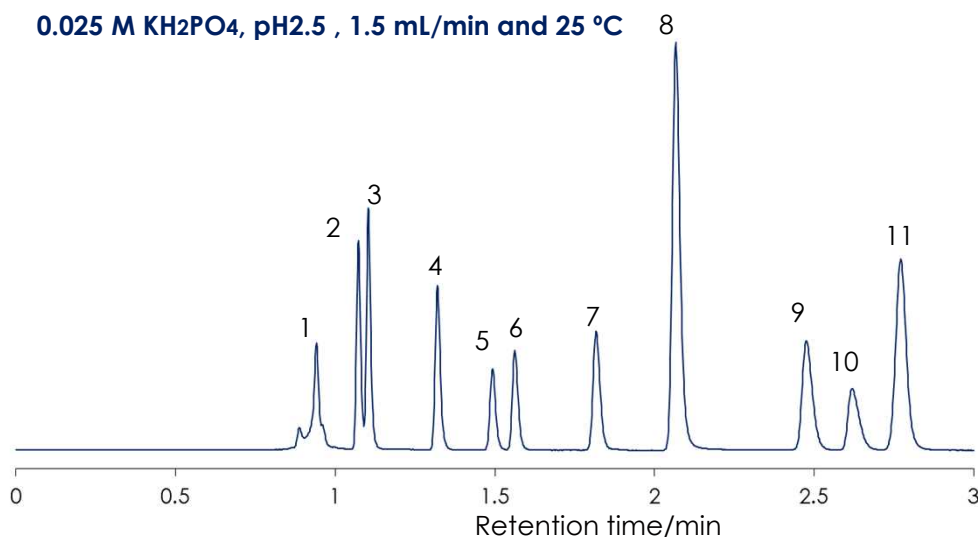
10 = Succinic acid (1000 ppm), 11 = Fumaric acid (10 ppm).

有機酸の分離 (2)

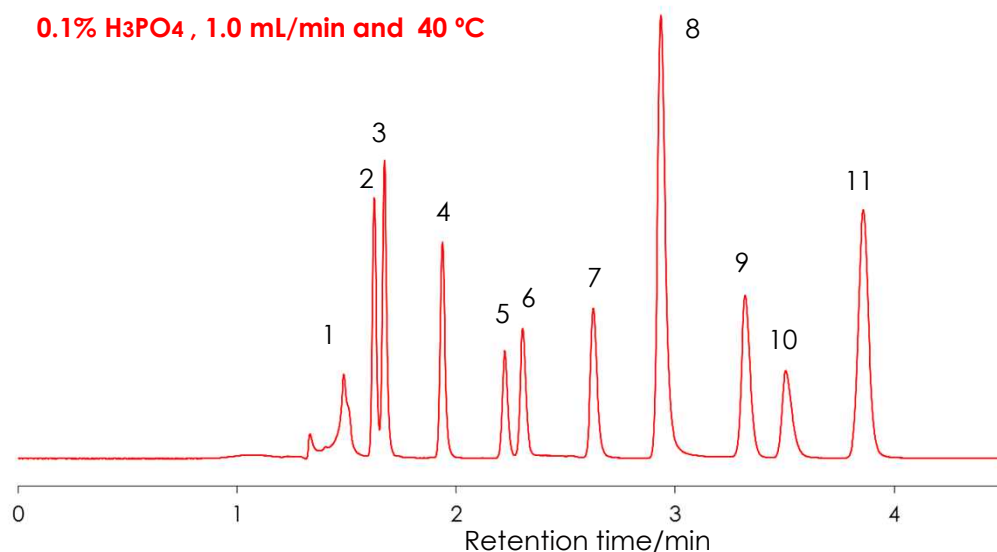
Organic acids (2)

SunShell RP-AQUA 2.6 μm, 150 x 4.6 mm i.d.

0.025 M KH₂PO₄, pH2.5, 1.5 mL/min and 25 °C



0.1% H₃PO₄, 1.0 mL/min and 40 °C



Column: SunShell RP-AQUA 2.6 μm, 150 x 4.6 mm

Mobile phase: 0.025 M KH₂PO₄, pH2.5 and 0.1% H₃PO₄

Flow rate: 1.5 mL/min and 1.0 mL/min

Column pressure: 32 MPa for 1.5mL/min and 18 MPa for 1.0 mL/min

Temperature: 25 °C and 40 °C

Detection: UV@210nm

Injection volume: 2 μL

Sample: 1 = Oxalic acid (60 ppm), 2 = Tartaric acid (500 ppm), 3 = Formic acid (1000 ppm),

4 = Malic acid (1000 ppm), 5 = Lactic acid (1000 ppm), 6 = Acetic acid (1000 ppm),

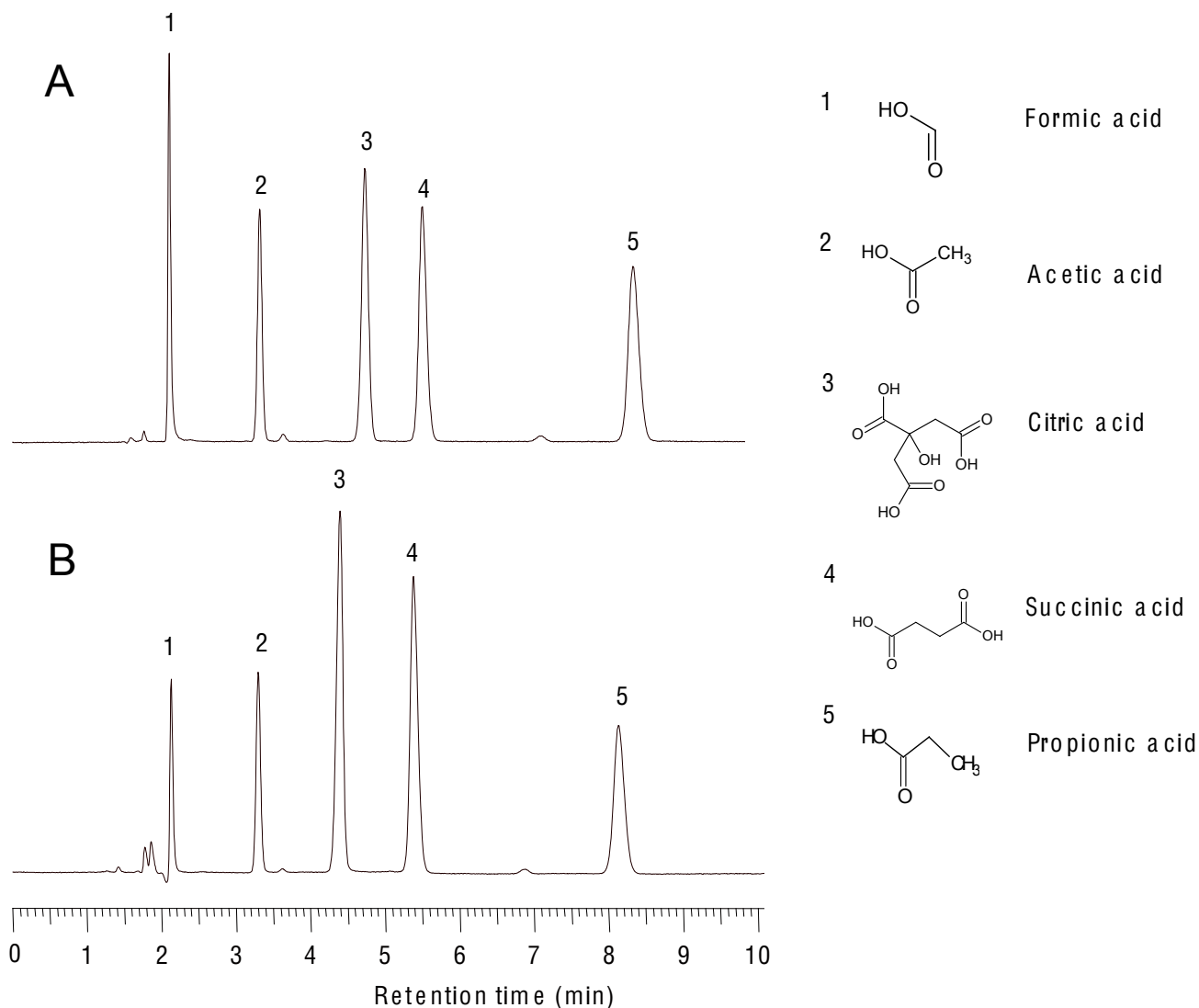
7 = Diglycolic acid (1000 ppm), 8 = Maleic acid (100 ppm), 9 = Citric acid (1000 ppm),

10 = Succinic acid (1000 ppm), 11 = Fumaric acid (10 ppm).

有機酸の分離

Organic acids

Sunniest RP-AQUA 5 μ m150 x 4.6 mm i.d.



Column: Sunniest RP-AQUA 5 μ m, 150 x 4.6 mm i.d.

Mobile phase:

A) 50 mM Ammonium phosphate + Phosphoric acid (pH 2.4)

B) 0.01% Trifluoroacetic acid (pH 2.9)

Flow rate: 1.0 mL/min

Temperature: 40 °C

Detection: UV@210 nm