## Application Data No. 1059 ChromaNik Technolog 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 8 Oxalic acid 2 2 11 Tartaric acid 9 3 6 5 10 Formic acid 4 OH 0 0.5 1.5 2.5 3 2 1 Malic acid Retention time/min 5 0.1% H3PO4 , 1.0 mL/min and 40 °C 8 Lactic acid 3 6 2 11 Acetic acid 9 Diglycolic acid 1 10 8 Maleic acid 0 1 4 2 3 он үн Retention time/min Citric acid Column: SunShell RP-AQUA 2.6 µm, 150 x 4.6 mm 10 Mobile phase: 0.025 M KH2PO4, pH2.5 and 0.1% H3PO4 Succinic acid 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 11 OF 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).

Fumaric acid