

# IC Application Note No. O-39

**Title:** Organic acids in samples from biogas production with ion exclusion chromatography after dialysis

**Summary:** Determination of formate, acetate, propionate, isobutyrate, butyrate, isovalerate, valerate and capronate applying ion exclusion chromatography with suppressed conductivity detection after Inline Dialysis.

**Sample:** Slurry (liquid manure)

**Sample Preparation:** Dilution 1:100 and subsequent Inline Dialysis

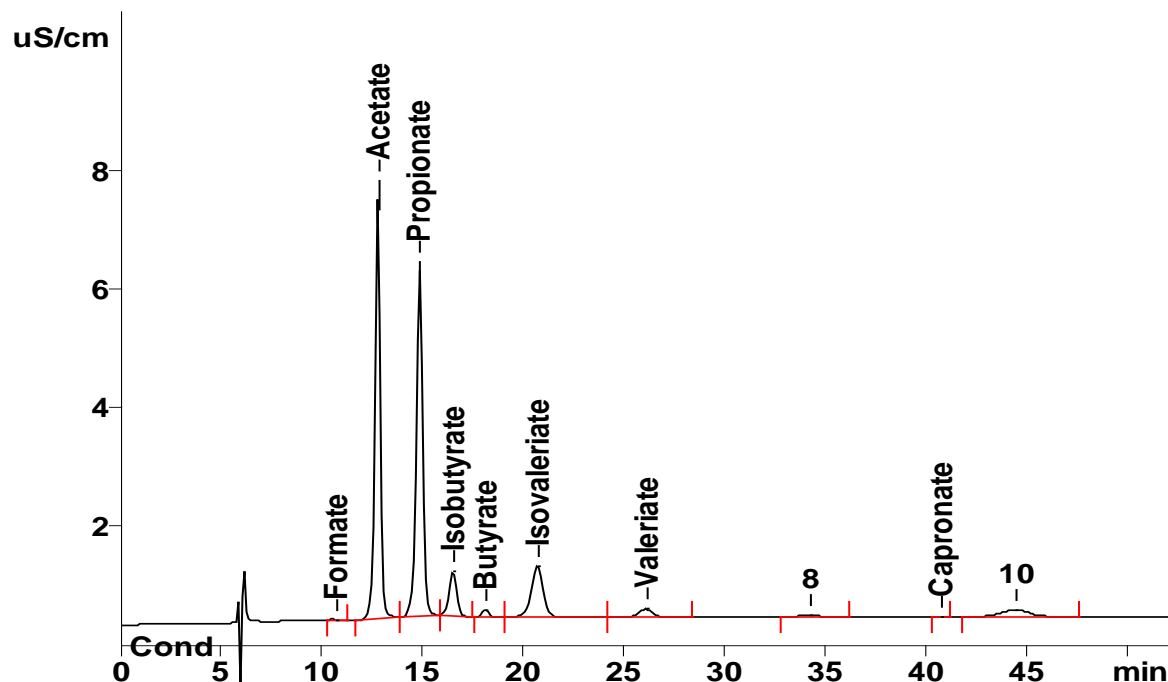
**Column:** 6.1005.200 Metrosep Organic Acids 250

**Eluent:** 0.5 mmol/L perchloric acid

**Suppressor:** Metrohm Suppressor Module (MSM, 10 mmol/L LiCl)

**Flow:** 0.6 mL/min

**Injection Volume:** 20  $\mu$ L



<b>Results:</b>	Acetate g/L	Propionate g/L	Isobutyrate g/L	Butyrate g/L	Isovalerate g/L	Valerate g/L
	5.47	7.43	1.44	0.21	3.27	0.63

Formate and Capronate: not detected. Peaks 8 and 10: unknown