

Determination of organic acids for valuation of biogas plants

Method VEV0069J

HPLC

Column: Eurokat H, 300 x 8 mm + 30 x 8 mm precolumn

Order No. 30GX340EKN
03GX340EKN

Phase: Eurokat H, 10 µm

Conditions: Eluent: 0.01 N sulfuric acid
Gradient: Isocratic
Flow rate: 1.0 ml/min
Temperature: 80 °C
Volume: 75 µL pretreated sample

Detection: UV, 210 nm

Sample pretreatment: A sample of fermentation sludge is clarified with the help of centrifugation and then charged with a suitable precipitating agent to avoid the influence of other disturbing substances. The gained supernatant is cleaned by SPE and filtered through a 0,45 µm filter.

Substances: Lactic acid, formic acid, acetic acid, propionic acid, iso-butyric acid, iso-valeric acid, n-valeric acid, caproic acid

Keywords: Biogas, fermentation sludge, carboxylic acids, Eurokat

Chromatogram:

- 1 Lactic acid
- 2 Formic acid
- 3 Acetic acid
- 4 Propionic acid
- 5 Iso- butyric acid
- 6 Iso- valeric acid
- 7 n- valeric acid
- 8 Caproic acid

