



SOCOTEC



Volatile Fatty Acid Analysis

SOCOTEC's specialist chemistry team has developed an innovative method for analysing Volatile Fatty Acids, meaning smaller sample volumes are required.

Volatile Fatty Acids (VFAs) are short chained aliphatic monocarboxylic acids with two to seven carbon atoms in the molecule. VFAs are strongly malodorous and can cause odour issues for people living nearby. They are also important in assessing the effectiveness of digestion within wastewater treatments.

Sources of Volatile Fatty Acids

Natural sources of VFAs include biological, from anaerobic biodegradation and fermentation, with human-made sources including livestock farming, agriculture, waste disposal and landfill.

Determining Volatile Fatty Acids in Samples

SOCOTEC has developed a reliable and robust method for determining VFAs in soil, water and air samples by Gas Chromatography using Flame Ionisation Detection (GC-FID).

INNOVATIVE METHODS FOR ANALYSING VOLATILE FATTY ACIDS

SOCOTEC's innovative method for analysing VFAs, in soil, water and air samples, removes the need for solvent extraction and complex derivatisation of the sample, therefore lower sample volumes are required, meaning faster turnarounds and increased recovery.

SOCOTEC's VFA analysis suite includes:

- Acetic acid
- Propionic acid
- Isobutyric acid
- n-Butyric acid
- Isovaleric acid
- n-Valeric acid
- Isocaproic acid
- n-Caproic acid
- Heptanoic acid

Pavement investigation

- Soil
- Wastewater
- Groundwater
- Landfill leachate
- Air samples (Sodium hydroxide treated Silica Gel tubes SKC 226-55)

Selecting a VFA analysis method that requires less sample and no solvent extraction can save time and lower the environmental impact.

MORE ABOUT OUR SERVICES

For more information and advice on analysing volatile fatty acids please call us on 0845 603 2112 or email salesuk@esocotec.com