

DETERMINATION OF SODIUM CONTENT IN BIODIESEL USING ATOMIC ABSORPTION SPECTROSCOPY (AAS)

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The biodiesel sample is diluted with a xylene solution. The sodium content in the sample is directly determined by flame atomic absorption spectrometry (*Figure 1*) at a wavelength of 589 nm with reference to a set of calibration solutions prepared from a sodium organometallic salt dissolved in a mixture of xylene and stock oil.



Figure 1. Atomic absorption spectrometer.

Amount of sample required: 5 g
Cost of analysis: RM 125 per sample*

Note: * As at June 2010; subject to change.

REFERENCE

EUROPEAN COMMITTEE FOR STANDARDIZATION (2003). *EN 14108:2003 Fat and Oil Derivatives – Fatty Acid Methyl Esters (FAME) – Determination of Sodium Content by Atomic Absorption Spectrometry.*

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