DETERMINATION OF PHOSPHORUS CONTENT IN BIODIESEL USING INDUCTIVELY COUPLED PLASMA OPTICAL EMISSION SPECTROMETER (ICP OES)

YUNG CHEE LIANG and CHOO YUEN MAY



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weighed test portion of the sample is diluted in xylene. The solution is introduced in aerosol form into an argon plasma of the ICP OES spectrometer (*Figure 1*). The phosphorus content is calculated with reference to a set of calibration solutions prepared. The wavelengths used are 213.6 nm and 178.3 nm.



Figure 1. Inductively coupled plasma optical emission spectrometer (ICP OES).

Amount of sample required: 5 g

Cost of analysis: RM 200 per sample*

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

REFERENCES

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AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) (2009). ASTM D4951-09 Standard Test Method for Determination of Additive Elements in Lubricating Oils by Inductively Coupled Plasma Atomic Emission Spectrometry.





For more information, kindly contact:

Director-General
MPOB
P. O. Box 10620
50720 Kuala Lumpur, Malaysia.
Tel: 03-8769 4400

Fax: 03-8925 9446 www.mpob.gov.my