



Convenor:
Barry Cahill
PSA Peugeot Citroën
18 rue des Fauvelles
92250 La Garenne Colombes
France
Tel: +33 1 56 47 20 66
Email: cahill@mpsa.com

Doc. No

TF/N39

Date: 2008-09-15

Total pages: 2

CEN/TC 19/WG 24/TF Biodiesel

Title: Standardisation of FAME and FAEE for use as automotive diesel engines fuel

C17+ editorial for EN 14214

Dear TF FAME members,

At the last meeting in London, when ester content and the possibility of missing animal fat based esters was debated, I suggested requesting during the UAP ballot the addition of an informative note towards the C17+ in relation to the old EN 14103 test method. Mike Scott and Juergen Fischer were given the task to draft such a note in consultation with Martin Mittelbach and Florence Lacoste. Inclusion of that information in this year's EN 14214 revision was accepted by the TF.

The idea was that a note would be presented to the FAME TF members to allow them to bring it as an editorial comment during the UAP ballot, which ends 24 September 2009. Enclosed, you will find the suggestion being presented by the group. As the information sentence also requires an alternative procedure ("has to be carried out"), this would not exactly be an editorial update of the text. So we should at least advise the alternative procedure. The alternative procedure as such is effectively copied from the EN 14103 revision text that is being developed in CEN/TC 307.

I have concluded that there are two options:

1. include an extra Annex in EN 14214 that presents the procedure in case the ester content is lower than 96,5%.
2. add a NOTE: "If the ester content is lower than 96,5 %, it should be considered there might be a considerable amount of naturally occurring C-17 ME in the sample. The revised method gives indications for that".

The group agreed that option 1 at this moment is not editorial as it presents a new procedure.

Hence, TF FAME members are requested to advise their national standardization bodies and committees to agree with the UAP with the above presented editorial comment. Please note that all countries need to respond before 24 September 2008.

Hoping to have informed you sufficiently,
Many greetings,

Ortwin Costenoble
TF Secretary

Method modification for products naturally containing C17 methyl esters:

If the ester content is lower than 96.5 %, it should be considered there might be a considerable amount of naturally occurring C-17 ME in the sample. In that case the following procedure has to be carried out:

To take care of the natural content of C17:0 methyl ester found e.g. in animal fats, it is necessary to evaluate the exact amount (peak area). Two samples have to be prepared with equal sample amount of 250 mg. To one sample (S_0) 5ml of heptadecanoate solution (5.3) is added, to the second one (reference sample) 5 ml heptane (5.1). Both samples are measured according the method (Annex A). From the reference sample the C 17 methyl ester peak has to be integrated and the corresponding area (A_{ER}) noted down. The ester content of S_0 has to be calculated by modification of 10.1 according:

$$C = \frac{(\sum A) - (A_{EI} - A_{ER})}{(A_{EI} - A_{ER})} \times \frac{C_{EI} \times V_{EI}}{W} \times 100$$

whereby:

A_{ER} is the peak area corresponding to methyl heptadecanoate of the reference sample.