



**NEN** Energy Resources

P.O. Box 5059 2600 GB Delft

Vlinderweg 6 2623 AX Delft The Netherlands

www.nen.nl

Netherlands Standardization Institute

to the CEN National Standardization Bodies

**SUBJECT** CEN/TC 19 explanation on total contamination test result and applicability for FAME

YOUR REFERENCE

OUR REFERENCE TC192014-07 **DATE** 2014-07-13

Dear Madam, dear Sir,

to whom it may concern

We are writing to you to clarify the current requirements for total contamination set out in the CEN fuel specifications, i.e. table 1 (Generally applicable requirements and test methods). Total contamination is one of the most important parameters of the European standards to ensure fuel cleanliness for automotive diesel (EN 590) and Fatty Acid Methyl Ester (FAME, also called biodiesel – EN 14214).

EN 12662, the European test method for total contamination, has recently been revised (EN 12662:2014) in order to improve the precision of the method. Significant changes were applied to the test procedure. However since the most recent revision was published by CEN, a number of important issues have been highlighted by the industry.

Firstly there is a date conflict between EN 14214:2012+A1 2014, in that it refers to EN 12662:2013 in Clause 2, and the actual date of the revised test method which is EN 12662:2014. This error occurred as EN 12662 was expected to be published by CEN at the end of 2013, but eventually was published in early 2014. The intent of EN 14214:2012+A1 2014 is that the 2014 test method should be conducted to confirm compliance.

With respect to EN 590:2013 the requirement for total contamination set out in Table 1 and in clause 2 prEN 12662:2012 is referenced. Obviously, this has also been superseded and it is now required that EN 12662:2014 be used to determine total contamination.

Both these date conflicts will be resolved at the next opportunity when EN 14214 and EN 590 are revised.

**CONTACT DETAILS** T +31 (0)15 2690330 M +31 (0) 633334673 ortwin.costenoble@nen.nl Secondly, recent market surveillance in several countries of labs using the new test procedure, has given strong indications that the use of EN 12662:2014 for pure FAME is not recommended as test method in case of dispute.

The issues discovered so far are significant differences in test results between the 2014 and 1998 version of the technique. CEN has established a taskforce to study the reasons and to solve these deficits. In the meantime while the taskforce investigates the above issues, CEN/TC 19 strongly recommends to temporarily continue the use of EN 12662:1998 (the original version) in order to generate valid test results for the determination of the total contamination of FAME.

EN 12662:2014 can be used without problems for automotive diesel and blends thereof with FAME.

As a last point of attention, it has been noted that EN 12662:2014 is ambiguous as to how filtration times greater than 30 minutes should be dealt with (such as in clauses 11, 13 and 15). CEN/TC 19 experts' agreed that if the filtration time exceeds 30 minutes the test should be stopped and the result reported as an incomplete filtration together with the volume filtered. Failure to complete the filtration in 30 minutes means the FAME or EN 590 diesel fuel product under test does not comply with the EN 14214 and EN 590 specifications respectively.

We hope this helps clarify the current requirements for EN 12662 testing in EN 14214 and EN 590.

Regards,

Ortwin Costenoble on behalf of Liesbeth Jansen CEN/TC 19 Chairman

Nigel Elliott CEN/TC 19/WG 24 Convenor.



CEN/TC 19

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**PAGE** 2/2