Commission Implementing Regulation (EU) 2015/1833 of 12 October 2015 amending Regulation (EEC) No 2568/91 on the characteristics of olive oil and olive-residue oil and on the relevant methods of analysis

ANNEX VI

Annex XIX to Regulation (EEC) No 2568/91 is amended as follows:

(1) the title is replaced by the following:
DETERMINATION OF ALIPHATIC AND TRITERPENIC ALCOHOLS CONTENT BY CAPILLARY GAS CHROMATOGRAPHY;

(2) point 1 is replaced by the following:

1. SUBJECT MATTER

This Annex describes a method for the determination of aliphatic and triterpenic alcohols content in oils and fats.;

(3) point 4.11 is replaced by the following:

4.11. Reference solution for thin-layer chromatography: C_{20}-C_{28} alcohols 0,5 % in chloroform, or a fraction of alcohols obtained as indicated in point 5.2 from the unsaponifiable matter of an olive-pomace oil.;

(4) points 5.2.5 and 5.2.6 are replaced by the following:

5.2.5. The plate is sprayed lightly and evenly with the solution of 2′, 7′-dichlorofluorescein when the plate is observed under ultra violet light. The aliphatic alcohols band can be identified through being aligned with the stain obtained from the reference solution: mark the limits of the band with a black pencil; outlining the band of aliphatic alcohols and the band immediately above that, which is the terpenic alcohols band, together (Note 4).

Note 4: The aliphatic alcohols band and the terpenic alcohols band are to be grouped together in view of the possible migration of some aliphatic alcohols into the triterpenic alcohols band. An example of the TLC separation in given in Figure 1 of the Appendix.

5.2.6. Using a metal spatula scrape off the silica gel in the marked area. Place the finely comminuted material removed into the filter funnel (3.7). Add 10 ml of hot chloroform, mix carefully with the metal spatula and filter under vacuum, collecting the filtrate in the conical flask (3.8) attached to the filter funnel.

Wash the silica gel in the flask three times with ethyl ether (approximately 10 ml each time) collecting the filtrate in the same flask attached to the funnel. Evaporate the filtrate to a volume of 4 to 5 ml, transfer the residual solution to the previously weighed 10 ml test tube (3.9), evaporate to dryness by mild heating in a gentle flow of nitrogen, make up again using a few drops of acetone, evaporate again to dryness, place in an oven at 105 °C for approximately 10 minutes and then allow to cool in a desiccator and weigh.

The residue inside the test tube is composed of the alcoholic fraction.;

(5) point 5.4.4 is replaced by the following:

5.4.4. *Peak identification.*

The identification of individual peaks is effected according to the retention times and by comparison with the standard TMSE mixture, analysed under the same conditions.

Examples of chromatogram of the alcoholic fraction of a refined olive oil is shown in Figures 2 and 3 of the Appendix.;

(6) the Appendix is replaced by the following:

‘Appendix

TLC separation example and chromatogram examples

Figure 1

Thin-layer chromatography plate of the unsaponifiable fraction from olive oil eluted with hexane/ethyl ether (65/35)

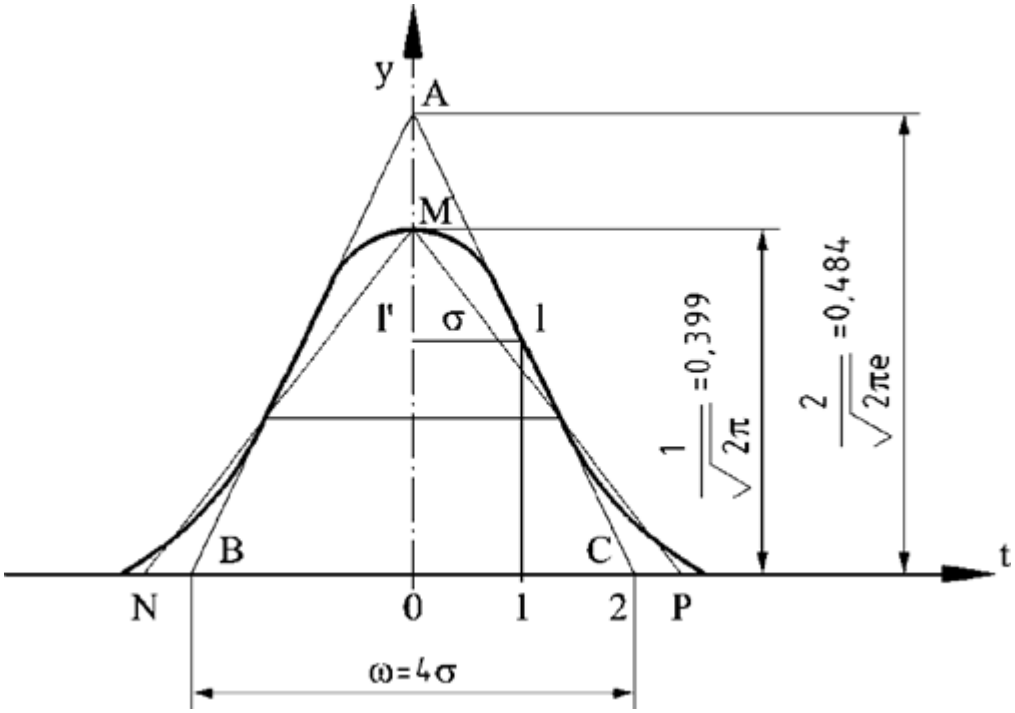


Figure 2

Chromatogram of the alcoholic fraction of a refined olive oil

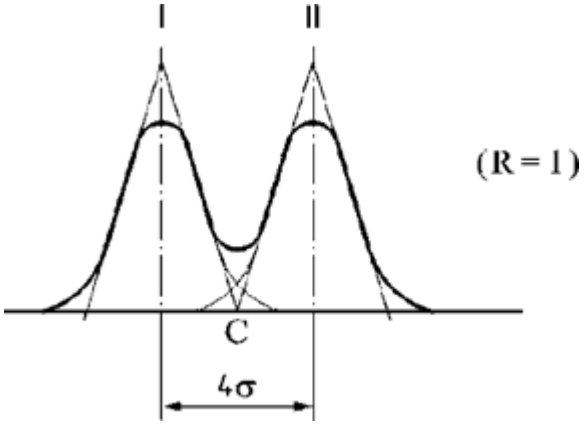
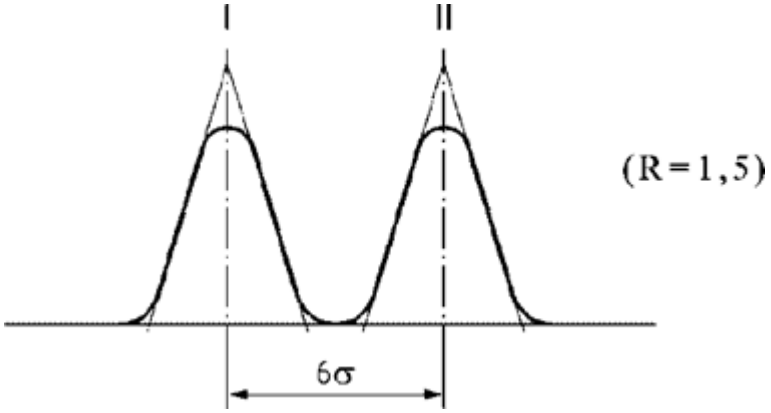


Figure 3

Aliphatic and triterpenic alcohols of a refined olive oil and a second centrifugation olive oil



Changes to legislation:
There are currently no known outstanding effects for the Commission Implementing Regulation (EU) 2015/1833, ANNEX VI.