

PT 21a: Olive oils – physical and chemical analysis

Details of the program:

- Proficiency testing scheme created in 2008
- 57 registered laboratories from 20 countries
- **PTS accredited by COFRAC**
- 3 rounds per annual series
- The time for analysis is 4 weeks
- Samples are shipped via express carrier at the end of the previous month.



Schedule:

DATE	CODE	MATRIX	VOLUME
September	0121	Olive oil	250 ml
February	0121	Olive oil	250 ml
June	0221	Extra virgin olive oil	250 ml

ANALYTES

Analyses to be carried out firstly:

Moisture and volatile matter content
 Moisture content
 Peroxide value
 Ultra violet absorbance
 Tocopherols

Other analyses:

Impurities
 Oleic acidity
 Iodine value
 Index of saponification
 Unsaponifiable matter
 Total sterols
 Erythrodiol + uvaol
 Stigmastadienes
 Delta ecn 42
 Fatty acid ethyl esters^{NA}
 Waxes^{NA}
 Diethylhexyl phthalate^{NA}
 Density at 20 °c^{NA}

Fatty acids composition:

Arachidic, Behenic, Erucic, Gondoic,
 Heptadecenoic, Lauric, Lignoceric, Linoleic,
 Linolenic, Margaric, Myristic, Nervonic, Oleic,
 Palmitic, Palmitoleic, Stearic.

Trans fatty acids:

Trans-octadecenoic, Trans-octadecadienoic,
 Trans-octadecatrienoic...
 Sum of saturated acid^{NA}.

Sterols:

Brassicasterol, Cholesterol, Cholestanol,
 Stigmasterol, Campesterol + 2,4 methylene
 colesterol, Delta 7-campesterol, Delta 5-
 avenasterol, Delta 7-stigmastenol, Delta 7-
 avenasterol...

Triglycerides by (HPLC and GC)

Non exhaustive list

NA *: Not accredited parameter

Note: Matrices and analytes may be changed or removed for technical or scientific reasons.

Please refer to current application form available in your member area (www.bipea.org).