

Prairie Tide Analytical Service Listing – Olive Oil

Prairie Tide Diversified (PTD) offers testing as pertains to the identity, quality and contaminant content of olive oil.

Individual Tests

Test	Method
Free Fatty Acid ¹	AOCS Ca 5a-40
p-Anisidine Value ¹	AOCS Cd 18-90
Peroxide Value ¹	AOCS C d 8b-90
TOTOX Calculation	USP <401>
Fatty Acid Composition (mg/g) ¹	AOCS Ce 1i-07, Ce 1j-07
Fatty Acid Profile (%) ¹	AOCS Ce 1i-07, Ce 1j-07
Moisture ¹	AOCS Ca 2e-84
Moisture and Volatile matter	AOCS Ba 2a-38
Residual Solvents (Class 1/2)	USP <467>
Sterols	HPLC
Stigmastadienes	HPLC
Tocopherol	HPLC
Total Polyphenols	UV/Vis Spectroscopy
Hydroxytyrosol	HPLC
Diacylglycerols	AOCS Cd 11b-91
Insoluble Impurities ¹	AOCS Ca 3a-46
Pheophytins (Chlorophylls)	AOCS Cc 13k-13
Pyropheophytins	
Trace Metal Analysis	AOCS Ca 17a-18
Unsaponifiable Matter	AOCS Ca 6a-40
UV Absorbance	AOCS Ch 5-91

Olive Oil ID/Quality – EVOO vs VO vs ROO vs Olive Pomace Oil vs Lampante Oil

Test	Method
Fatty Acid Profile (%) ¹	AOCS Ce 1i-07, Ce 1j-07
Free Fatty Acid ¹	AOCS Ca 5a-40
Peroxide Value ¹	AOCS C d 8b-90
UV Absorbance	AOCS Ch 5-91
Organoleptic Characteristics ²	O.N.A.O.O.

² Registered sommelier with the International Registry of Olive Oil Tasters (O.N.A.O.O.)

Stability/Shelf-Life Projection

(Based on Guillaume and Ravetti. (2016), J. Chem., **2016**, Article ID 6393962)

Test	Method
Shelf-Life Prediction	Calculation
Oxidative Stability Index	Cd 12b-92
Pyropheophytin	AOCS Cc 13k-13/ ISO 29841
Diacylglycerols	¹ H-NMR

Detailed Identification Tests

Test	Method
Fatty Acid Profile (%) ¹	AOCS Ce 1i-07, Ce 1j-07
Sterol	HPLC
Stigmastadienes	HPLC
Diacylglycerols	AOCS Cd 11b-91
Unsaponifiable Matter	AOCS Ca 6a-40

Quality Tests

Test	Method
<i>Quality Tests I</i>	
Free Fatty Acid ¹	AOCS Ca 5a-40
p-Anisidine Value ¹	AOCS Cd 18-90
Peroxide Value ¹	AOCS C d 8b-90
TOTOX Calculation	USP <401>

Test	Method
<i>Quality Tests II</i>	
Free Fatty Acid ¹	AOCS Ca 5a-40
p-Anisidine Value ¹	AOCS Cd 18-90
Peroxide Value ¹	AOCS C d 8b-90
TOTOX Calculation	USP <401>
Hydroxytyrosol	HPLC
Diacylglycerols	AOCS Cd 11b-91
Pheophytins (Chlorophylls)	AOCS Cc 13k-13
Pyropheophytins	

Test	Method
Quality Tests III	
Free Fatty Acid ¹	AOCS Ca 5a-40
p-Anisidine Value ¹	AOCS Cd 18-90
Peroxide Value ¹	AOCS C d 8b-90
TOTOX Calculation	USP <401>
Moisture and Volatile matter	AOCS Ba 2a-38
Stigmastadienes	HPLC
Total Polyphenols	UV/Vis Spectroscopy
Hydroxytyrosol	HPLC
Diacylglycerols	AOCS Cd 11b-91
Trace Metal Analysis	AOCS Ca 17a-18
Pheophytins (Chlorophylls)	AOCS Cc 13k-13
Pyropheophytins	
UV Absorbance	AOCS Ch 5-91

Sensory Characteristics

Test	Method
Organoleptic Characteristics ²	O.N.A.O.O.
Odour	
Taste	
Colour	
Median Of Defect (M _d)	
Median Of The Fruity (M _f)	

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