

NIR-report Olive oil Screening

Date/ Datum
Your sign/ Ihr Zeichen
Packing/ Verpackung
Our sign/ Unser Zeichen
Origin/ Ursprungsangabe
Date of analysis/ Tag der Untersuchung

17.11.2021
Frühöl
100ml Probengefäß
2021-5886
keine Angabe
17.11.2021

Flavor Profile/ Aroma-Profil (measured by NIRS)	Without Correction	U *	Uncertainty of the result/ Messunsicherheit
Fruitiness/ Fruchtigkeit (Range 0-10) *According COI -2020	5,4	±0,17	Note: Some panels reduce the intensities of
Bitterness/ Bitternote (Range 0-10)	3,2	±0,12	fruitiness, if a defect occurs. Harmony is set
Pungency/ Schärfe (Range 0-10)	3,3	±0,12	to zero. Medium fruitiness: 3,0 - 6,0 and
Harmony/ Harmonie (Range 0-10)	6,6	±0,34	Intense fruitiness: > 6,0
Green (Intensity)/ Grün	99 %		Green
Ripe (Intensity)/ Reif	1 %		
Probability of occurring sensory defects/ Wahrscheinlichkeit des Auftretens sensorischer Defekte	LOW		
Probability of fermentative defects/ Wahrscheinlichkeit des Auftretens fermentativer Fehler			fusty, MS, musty, winey, grubby, frostbitten
Probability of oxidative defects/ Wahrscheinlichkeit des Auftretens oxidativer Fehler			rancid, burnt, rough
Detection of Adulterated Olive Oil			
Probability of detecting adulterated olive oil	LOW		
Probability of deodorisation (unpermitted thermal treatment (70°C- 130 °C) or addition of soft deodorized oils			
Probability of blending extra virgin olive oil with refined vegetable oil, refined olive oil or pomace oils			
Quality/ Qualität (measured by NIRS)			
Free Fatty Acids/ freie Fettsäuren (FFA) (%)	0,64	±0,05	Legal Limit: 0,8 %
Peroxide Value/ Peroxidzahl (meq O2/kg)	5,0	±2,0	Legal Limit: 20 meq O2/kg
Spectrometry K232-Value/ K232	1,96	±0,17	Legal Limit: 2,5
Spectrometry K270-Value/ K270	0,05	±0,01	Legal Limit: 0,22
Pyropheophytins/ Pyropheophytine (%)	3,6	±0,5	Should be lower than 12 %
1,2-Diglycerides/ 1,2 Diglyceride (%)	75,5	±2,5	Should be higher than 45 %
Anisidine Value/ Anisidinzahl	6,1	±0,5	
Alkyl Esters/ Alkylester (mg/kg)	6	±7,9	Legal Limit: 150 mg/kg
Total Sterol Content/ Sterolgehalt (mg/kg)	1750	±5,0	Legal Limit - Minimum 1000 mg/kg
Phenolics (Tyrosol)/ Phenole (mg/kg)	297	±24	Health Claim:>250 mg/kg* *EU 2017/2373 (14.12.2017)
Fatty acid composition/ Fettsäurezusammensetzung, % (NIRS); extracted			
Mono-unsaturated fatty acids/ einfach ungesättigte Fettsäuren	75,6	±0,7	
Poly-unsaturated fatty acids/ mehrfach ungesättigte Fettsäuren	12,1	±0,6	
Saturated fatty acids/ gesättigte Fettsäuren	12,3	±0,5	
Iodine Value/ Jodzahl	87,6	±0,3	
Classification/ Klassifizierung	Extra Virgin		
Geographical origin (region)/ Ursprungsland* (Region)	Griechenland (Norden)		
Cultivar/ Sorte	Maronia		
Age/ Alter (months/ Monate; biological age/ Biolog. Alter - Storage at dark/ Dunkle Lagerung, 15-18 °C)	1		
Remaining storage life at 20°C/ Rest-MHD (months/ Monate) (if no defects/ wenn kein Defekt)	10		
Overall quality - Range 1 (=very bad) to 8 (=Premium) (if no defects!!!) Qualitätseinstufung - Skala 1(=sehr schlecht) bis 8 (Premium) (wenn kein Defekt!!!)	Very good quality (6)		Range of quality/ Qualitätsskala: Very bad quality/ sehr schlecht Low quality/ niedrige Qualität Low standard quality/ untere Standard Qualität Standard/ Standard/ Standard Qualität Good quality/ Gute Qualität Very good quality/ Sehr gute Qualität High quality (excellent)/ Hohe Qualität Premium quality/ Premiumqualität
<p>Remarks: All results of this report are based on the statistical evaluation of the NIRS measurements. In general these results correlate well with the corresponding laboratory values. It may happen that they are not identical or equal. *The identification of the origin and the quality are done also statistically comparing the compositional and sensorial properties of an oil with analytical data obtained by traditional laboratory methods. So it can happen that the origin of an olive oil is identified as an Spanish one, although it is from Portugal because the fatty acid and TAG patterns of this blend may be very similar to the pattern of Spanish oils. But it can also be a blend of two or three countries producing a pattern which is similar to Portugisian oils. Another example if an Italian olive oil from Tuscany is identified as an oil from Croatia as the geographical conditions are very similar. A wrong identification cannot be excluded. The probability of the statistical evaluation concerning country is 95 %, of the region: 85 % and the variety about 85 %. A different identified origin than the labeled origin only means that the labeled origin could not be confirmed.</p> <p>The results are only representative for the analyzed sample. This report has been automatically generated. Die Resultate sind nur repräsentativ für die gemessene Probe. Der Bericht wurde automatisch generiert. (Software Version 20-10-2021; Validation)</p>			

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References/ Referenzen:

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- C.Gertz, A.Gertz, B.Matthäus, I.Willenberg A Systematic Chemometric Approach to Identify the Geographical Origin of Olive Oils, Eur. J. Lipid Sci. Technol. 2019, Eur. J. Lipid Sci. Technol. 2019, 1900281
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