

Typical olive oil wastewater composition

Parameter	Vlyssides et al., 1996		Di Giovacchino & Mascolo, 1988	
	Press	3-phase	Press	3-phase
Total solids, g/l	99,7	63,5	129.7	61.1
Total Suspended Solids, g/l	4,51	2,80		
Total Volatile solids, g/l	87,2	57,4		
Ash, g/l	9,69	6,13	20	6.4
Total Organic Carbon, g/l	64,1	39,8		
Total Kjeldahl Nitrogen, g/l	1,15	0,76		
Phosphorous (P ₂ O ₅), g/l	0,87	0,53		
pH	4,50	4,80	5.27	5.23
BOD ₅ , mg/l	68.700	45.500		
COD, mg/l	158.000	92.500	146.000	85.700
Specific Weight, g/cm ³	1,05	1,05	1.049	1.020
Conductivity, mmhos/cm	18,0	12,0		
Total Sugars, g/l	25,9	16,1	35.8	15.9
Fats and Oils, g/l	2,80	1,64	2.26	5.78
Polyalcohols, g/l	4,75	3,19		
Total Phenols, g/l	17,2	10,6	6.2	2.7
Tannins, g/l	6,74	4,01		
Potassium (K ₂ O), g/l	3,77	2,37	2,98	1,14
Sodium (Na ₂ O), mg/l	406	243	148	48.5
Calcium (CaO), mg/l	382	271	227	96,6
Fe (FeO), mg/l	48,3	32,0	42.3	18,0
Magnesium (MgO), mg/l	74,0	50,0	322	149
Silicon (SiO ₂), mg/l	28,6	18,0		
Total Sulfur, mg/l	101	63,0		
Total Chlorine, mg/l	219	124		
Mn, mg/l	18,2	12,0	5.32	1.55
Zn, mg/l	19,7	12,0	3.57	2.06
Cu, mg/l	10,50	6,00	3.12	1.59

References

- Vlyssides, A.G., Bouranis, D.L., Loizidou, M., and Karvouni, G. 1996. Study of a demonstration plant for the co-composting of olive oil processing wastewater and solid residue. *Bioresource Technology*, 56, 187-193.
- Di Giovacchino, L., and Mascolo, A. 1988. Incidenza delle tecniche operative nell'estrazione dell'olio dalle olive con il sistema continuo. *Rivista Italiana delle Sostanze Grasse*, 65, 283-289.