Supplementary Materials

Rheological and Microstructural Characteristics of Commercial Mayonnaise-Type Emulsions: A Chemometric Analysis [†]

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Table S1. Descriptive characteristics of samples[*].

Sample	Oil content	Oil type	Emulsifier/Stabilizer/Thickener[**]	Acidity agent[***]	Trade mark	Country's manufacturer
K25	25	Sunflower	EYP/XG,GG/MS	LA,AA	Kuner	Austria
T28	28	Sunflower	MS/XG/MS	LA,AA	Torchin	Ukraine
S30	30	Sunflower	MS/ XG,GG/MS	LA,AA	Schedro	Ukraine
O40	40	Sunflower	MS/ XG,GG/MS	CA,AA	Olis	Ukraine
Y41	41	Olive	EYP/LBG,P/MS	LA	Yabarra	Spain
S50	50	Sunflower	EYP/XG,GG/MS	LA,AA	Schedro	Ukraine
T50	50	Sunflower	EYP/XG/MS	LA,AA	Torchin	Ukraine
K50	50	Sunflower	EYP/-/MS	LA,AA	Kuner	Austria
L67	67	Sunflower	EYP/XG/-	LA,AA	Olkom	Ukraine
T72	72	Sunflower	EYP/XG/MS	LA,AA	Torchin	Ukraine
N76	76	Canola	EYP/XG,GG/MS	CA	Kania	Poland

[*] The main ingredients of mayonnaises are identified according to the information on the sample label and their functional use in the formulation is presented

[**]XG , GG and LBG are xanthan, guar and locust bean gums; MS is modified corn or potato starch's; EYP is egg yolk products; P is pectin

[***]LA, CA and AA are lactic, citric and acetic acids

Table S2. Principal component factor analysis: factor loading[*].

Variable	Factor 1	Factor 2	Factor 3	Factor 4
Oil content	0.121	<u>0.899</u>	0.150	0.023
pH	−0.646	−0.192	0.298	−0.415
Acidity	−0.546	0.073	−0.686	−0.257
Aggregation degree τ_c	<u>0.888</u>	0.096	0.076	0.123
Structure looseness χ	0.282	<u>0.796</u>	−0.130	−0.336
Casson's viscosity coefficient η_c	−0.681	0.354	0.254	−0.323
Static yield stress	0.412	−0.144	<u>0.804</u>	−0.368
Volume mean diameter D_{43}	<u>−0.709</u>	−0.119	0.403	0.410
SPAN	0.453	−0.631	−0.228	−0.451
Variance	2.9402	2.0520	1.5306	0.9785
% Variance	32.7	22.8	17.0	10.9

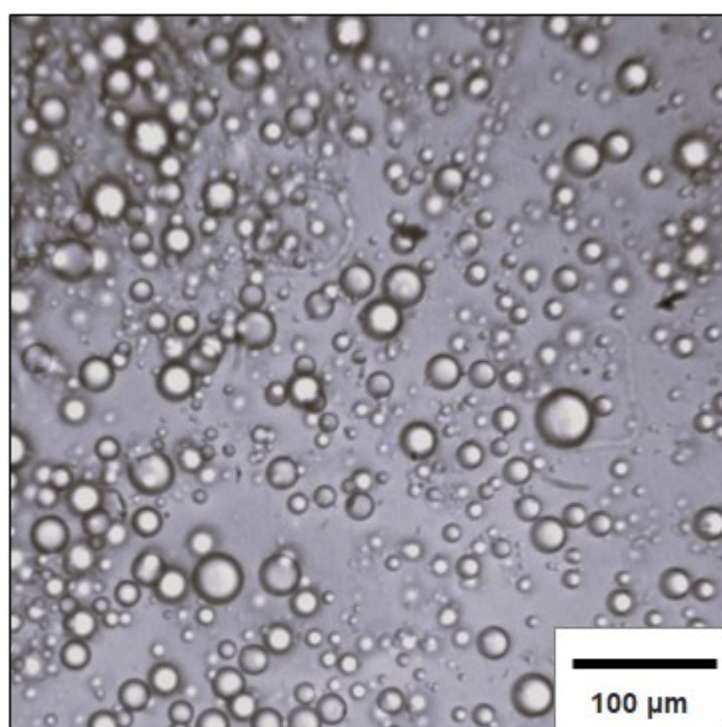[*] Loading factors exceeding 0.7 are highlighted by underlining

Figure S1. Microphotograph of the structure of a sample of T28 mayonnaise with spherical drops of various sizes and flocculants as agglomeration of droplets.
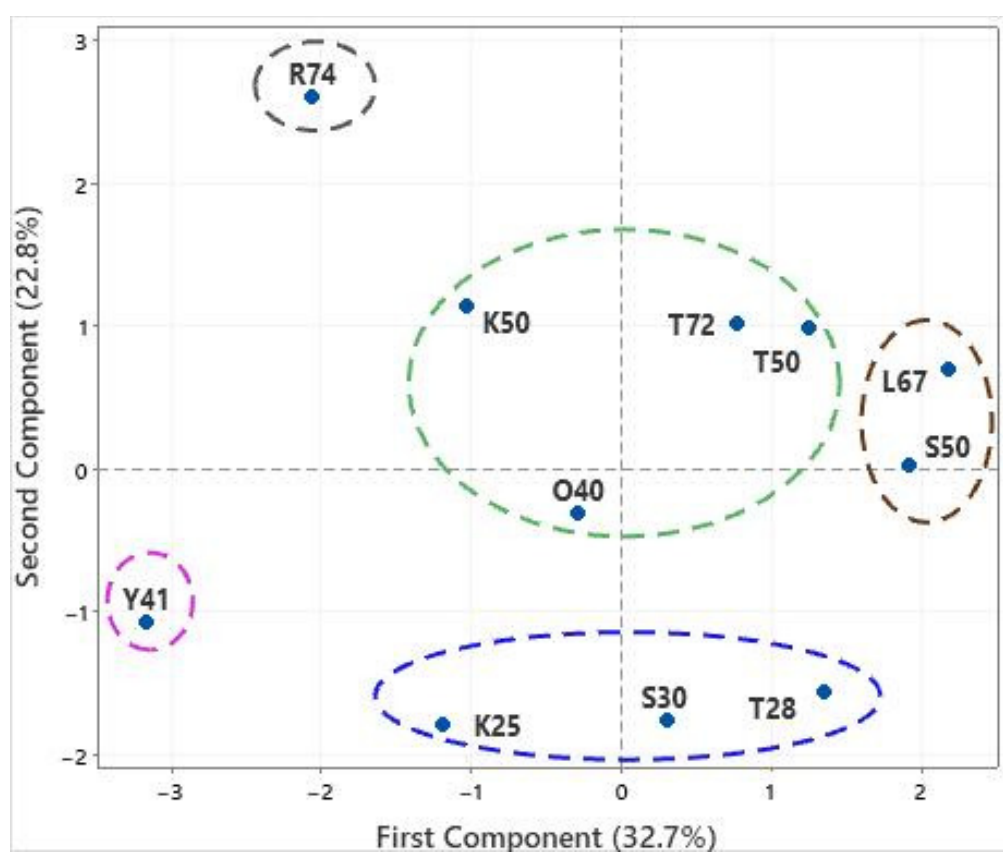

Figure S2. Principal component analysis: scope of samples and suspected clusters.