

Analytical report AR-25-HD-032898-02



Testing laboratory:

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Customer:

BRAINMARKET s.r.o.
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712 00 OSTRAVA
CZECH REPUBLIC

Issue date 01.10.2025

Sample code 540-2025-00044550

Sample reception date: 18.08.2025
Date of Testing: 18.08.2025 - 01.10.2025

Sample information:

Sample name, extended: ¹⁾ Brainmax Omega 3 Cod Liver Oil
Sample description: ¹⁾ 005-32407-243191
Client Purchase order nr.: Brainmax Omega 3 Cod Liver Oil, 240 ml
Order date: 15.08.2025
Client sample code: ¹⁾ 38508
Sampler: Customer
Additional sample description: 05/2028, PC5050703

Physical and chemical tests

Parameter	Unit	Result	Uncertainty of measurement *	Method	Method principle	TZ
Brutto sample weight of supplied sample	kg	0.97	3%	SOP MB.005.PB	Gravimetry	A
Anisidine number		64.9	4%	SOP 8.72. (ČSN EN ISO 6885)	Spectrophotometry	SA
Arsenic (As)	mg/kg	<0.03		Internal Method LS-PP-CH-85	ICP-MS	SA
Acid value (mg KOH/g)	mg KOH/g fat	0.53	6%	SOP 8.55.**	Volumetry	SA
Density	g/ml	0.921	0.001	Internal Method, LEI-SOP-00.14500.L, 2024-05	Densimetry	SA
Cadmium (Cd)	mg/kg	<0.10		Internal Method LS-PP-CH-85	ICP-MS	SA
Lead (Pb)	mg/kg	<0.30		Internal Method LS-PP-CH-85	ICP-MS	SA
Benzo(a)anthracene	µg/kg	< 0.5		Internal Method 6, CON-PV 01176 (2024-04)	GC-MS/MS	SA
Chrysene	µg/kg	< 0.5		Internal Method 6, CON-PV 01176 (2024-04)	GC-MS/MS	SA
Benzo(b)fluoranthene	µg/kg	< 0.5		Internal Method 6, CON-PV 01176 (2024-04)	GC-MS/MS	SA
Benzo(a)pyrene	µg/kg	< 0.5		Internal Method 6, CON-PV 01176 (2024-04)	GC-MS/MS	SA
Sum PAH 4	µg/kg	not calculable		Internal Method 6, CON-PV 01176 (2024-04)	GC-MS/MS	SA
Peroxide value	meqO2/kg	1.75	5%	SOP 8.54.	Volumetry	SA
C 4:0 (Butyric Acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA

Physical and chemical tests

Parameter	Unit	Result	Uncertainty of measurement *	Method	Method principle	TZ
C 5:0 (Valeric Acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 6:0 (Caproic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 7:0 (Enanthic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 8:0 (Caprylic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 9:0 (Nonanoic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 10:0 (Capric acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 11:0 (Undecanoic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 12:0 (Lauric acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 13:0 (Tridecanoic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 14:0 (Myristic acid)	g/100 g fat	4.2	0.3	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 14:1 (trans fatty acid)	g/100 g fat	0.2		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 14:1 (Myristoleic acid)	g/100 g fat	0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 15:0 (Pentadecanic acid)	g/100 g fat	0.3		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 15:1 (Pentadecenoic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 16:0 (Palmitic acid)	g/100 g fat	10.3	0.9	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 16:1 (trans fatty acid)	g/100 g fat	0.4		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA

Physical and chemical tests

Parameter	Unit	Result	Uncertainty of measurement *	Method	Method principle	TZ
C 16:1 (Palmitoleic acid)	g/100 g fat	8.1	0.1	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C:17 (Heptadecanoic acid)	g/100 g fat	0.2		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 17:1 (Heptadecenoic acid)	g/100 g fat	0.3		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:0 (Stearic acid)	g/100 g fat	2.2		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:1 (cis fatty acid)	g/100 g fat	0.5	1.5	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:1 tr 6 (fatty acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:1 n6 cis-Petroselinic acid	g/100 g fat	2.5		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:1 n9 trans-Elaidic acid	g/100 g fat	0.2		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:1 n9 (cis oleic acid)	g/100 g fat	16.0	0.3	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:1 n11 trans-Vaccen acid	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:1 n11 cis-Vaccen acid	g/100 g fat	4.7		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:2 trans (fatty acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:2 (trans-cis fatty acid)	g/100 g fat	<0.1	0.3	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:2 (cis-trans fatty acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:2 n6 (trans-Linolelaidic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:2 n6 (cis-linoleic acid)	g/100 g fat	1.4		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA

Physical and chemical tests

Parameter	Unit	Result	Uncertainty of measurement *	Method	Method principle	TZ
C 18:3 (trans fatty acid)	g/100 g fat	2.2	0.1	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C18:3 n3 (Alpha-Linolenic acid)	g/100 g fat	0.6		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 18:3 n6 (gamma-Linolenic acid)	g/100 g fat	0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C18:4 n3 (Octadecatetraenoic)	g/100 g fat	1.5		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 19:0 (Nonadecanoic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 20:0 (Arachidic acid)	g/100 g fat	0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 20:1 (Eicosenoic acid)	g/100 g fat	11.4		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 20:2 (Eicosadienoic acid)	g/100 g fat	0.2		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 20:3 n3 (cis-11,14,17-Eicosatrien acid)	g/100 g fat	0.3		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 20:3 n6 (cis-8,11,14-Eicosatrien acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 20:4n6 (Arachidonic Acid)	g/100 g fat	0.4		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 20:5n3 (cis-5,8,11,14,17-Eicosapentaenoic Acid)	g/100 g fat	8.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 21:0 (Heneicosanoic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 22:0 (Behenic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C22:1 erucic acid	g/100 g fat	0.9		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 22:2 n6 (cis-13,16-docosadienoic acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA

Physical and chemical tests

Parameter	Unit	Result	Uncertainty of measurement *	Method	Method principle	TZ
C22:5n-3 Docosapentaenoic (DPA)	g/100 g fat	1.5		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
DHA Docosahexaenoic acid C22:6	g/100 g fat	9.2		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 23:0 (Tricosanoic acid)	g/100 g fat	0.2		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 24:0 (Lignoceric acid)	g/100 g fat	<0.1		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
C 24:1 (Nervonic acid)	g/100 g fat	0.4		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
saturated fatty acids in the fat	g/100 g	17.7	3.1	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
monounsaturated fatty acids in the fat	g/100 g	44.9	4.5	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
polyunsaturated fatty acids in the fat	g/100 g	23.4	4.8	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
trans fatty acids in the fat	g/100 g	3.3	2.5	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
unidentifiable fatty acids in the fat	g/100 g	10.6		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
saturated fatty acids in the product	g/100 g	17.7		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
monounsaturated fatty acids in the product	g/100 g	44.9		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
polyunsaturated fatty acids in the product	g/100 g	23.4		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
trans fatty acids in the product	g/100 g	3.3		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
unidentifiabel FA in the product	g/100 g	10.6		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
Omega-3 fatty acids in the fat	g/100 g	20.9	2.5	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA

Physical and chemical tests

Parameter	Unit	Result	Uncertainty of measurement *	Method	Method principle	TZ
Omega-6 fatty acids in the fat	g/100 g	2.0	0.2	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
omega9 fatty acids in fat	g/100 g	28.7		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
Omega-3 and -6 fatty acids in the fat	g/100 g	22.8	2.5	DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
Omega-3 fatty acids in the product	g/100 g	20.9		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
Omega-6 fatty acids in the product	g/100 g	2.0		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
omega9 fatty acids in the sample	g/100 g	28.7		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
Omega-3 and -6 fatty acids in the product	g/100 g	22.8		DGF C-VI 11e(18)/10a(00) mod. [DE Food], SOP:00.12100.L	GC-FID	SA
Mercury (Hg)	mg/kg	<0.010		Internal Method LS-PP-CH-85	ICP-MS	SA
TOTOX		68.4	7%	SOP-N CH.37	Calculation	SN
Vitamin A - (Retinol)	µg/100 g	5831.803	1166.361	Internal Method T-VIT-MET3318 v.1.2	LC-DAD	SA
Vitamin D3 (Cholecalciferol)	µg/100 g	185.455	48.218	Internal Method T-VIT-MET3318 v.1.2	LC-DAD	SA
Vitamin E profile (Alfa-tocopherol)	mg/100 g	83.711	12.724	Internal Method T-VIT-MET3318 v.1.2	LC-FLD-DAD	SA
Vitamin E profile (Beta-tocopherol)	mg/100 g	1.826	0.343	Internal Method T-VIT-MET3318 v.1.2	LC-FLD-DAD	SA
Vitamin E profile (Delta-tocopherol)	mg/100 g	24.316	4.571	Internal Method T-VIT-MET3318 v.1.2	LC-FLD-DAD	SA
Vitamin E profile (Gamma-tocopherol)	mg/100 g	51.830	9.744	Internal Method T-VIT-MET3318 v.1.2	LC-FLD-DAD	SA
Vitamin E profile (sum tocopherols)	mg/100 g	161.683	30.396	Internal Method T-VIT-MET3318 v.1.2	LC-FLD-DAD	SA

Additional information

Measured values after conversion to 10 ml:

Eicosapentaenoic acid (EPA): 746 mg

Docosahexanoic acid (DHA): 847 mg

Sum of Omega 3: 1,93 g

Vitamin A: 537 µg

Vitamin D: 17,1 µg

Vitamin E: 14,9 mg

Decision rule: If the testing laboratory issues a statement of conformity, the decision-making rule according to ch. 4.2.1 of ILAC document G8:09/2019 Guidelines for the use of decision rules and statement of conformity. In such a case, the measurement uncertainty is not taken into account for the conformity statement. If measurement uncertainty is included the decision, this information is included in the statement of conformity. In such a case, proceed according to chap. 4.2.3 ILAC G8:09/2019.

Notes:

SOP, ŠPP - Standard operation procedure	TZ - type of test
ND - not detected by given method	A - test within the accreditation scope of EUROFINS CZ
CFU - Colony forming unit	N - test outside of the accreditation scope of EUROFINS CZ
NM - necessary quantity	SA - subcontracted accredited test
SN - subcontracted not accredited test	
* - the expanded measurement uncertainty, as determined by the extension coefficient $k = 2$ (with a 95% probability), does not include sampling uncertainty; if the measurement uncertainty is expressed in %, it is its relative value	
LOD – limit of detection, LOQ – limit of quantification, result between LOD and LOQ = detected	
1) - Information supplied by customer	
Unless otherwise stated in the notes, the place of the tests performance is workplace No. 1 - Prague - of EUROFINS CZ testing laboratory.	

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Worked out by: Michaela Vanková

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Test Certificate approved by:

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Head of Laboratory


