



PRODUCT TESTING REPORT

Ultra-Pure Omega-3 Fish Oil, Lot# SB018331

Date received: 01-Oct-2025

NDI#: 39592025

Analysis for:

Rational Nutrition LLC

800 N King Street

Suite 304 #4106

Wilmington, DE 19801

Date: 17-Oct-2025

A handwritten signature in black ink, reading 'Erin Carter', written over a horizontal line.

Erin Carter

Senior Program Manager,
Product Certifications

Dated: 17-Oct-2025

A handwritten signature in blue ink, reading 'Hyun-Ah Kim', written over a horizontal line.

Hyun-Ah Kim

Senior Program Manager,
Product Certifications

Dated: 17-Oct-2025

Oxidation Analysis

Component	Analytical Method	Specification	Result	Units	Meets Specification
Acid Value	AOCS Cd 3d-63	≤ 3	0.11	mg KOH/g	Yes
Anisidine Value	AOCS Cd 18-90	≤ 20	0.45		Yes
Peroxide Value	AOCS Cd 8b-90	≤ 5	1.43	meq/kg	Yes
Total Oxidation	Calculation	< 19.5	3.31		Yes

Essential Fatty Acid Profile

Fatty Acid as TG		mg per cap	%
C4:0	Butyric Acid	0.00	0.0
C6:0	Caproic Acid	0.23	0.0
C8:0	Caprylic Acid	0.26	0.0
C10:0	Capric Acid	0.22	0.0
C12:0	Lauric Acid	0.00	0.0
C14:0	Myristic Acid	1.41	0.1
C14:1	Myristolic Acid	0.00	0.0
C15:0	Pentadecanoic Acid	0.32	0.0
C16:0	Palmitic Acid	15.17	1.6
C16:1	Palmitoleic Acid	4.83	0.5
C18:0	Stearic Acid	41.92	4.4
C18:1	Oleic Acid	75.64	7.9
C18:2N6	Linoleic Acid	0.64	0.1
C18:3N6	Gamma-linolenic Acid	1.64	0.2
C18:3N3	Alpha-linolenic Acid	7.44	0.8
C18:4N3	Stearidonic Acid	17.89	1.9
C20:0	Arachidic Acid	8.14	0.8
C20:1	Eicosenoic Acid	40.88	4.3
C20:2N6	Eicosadienoic Acid	4.06	0.4
C20:3N6	Dihomo-gamma-linolenic Acid	3.82	0.4
C20:4N6	Arachidonic Acid	21.94	2.3
C20:3N3	Eicosatrienoic Acid	2.27	0.2
C20:4N3	Eicosatetraenoic Acid	17.70	1.8
C20:5N3 (EPA)	Eicosapentaenoic Acid	322.13	33.6
C21:5N3	Heneicosapentaenoic Acid	16.17	1.7
C22:0	Behenic Acid	0.00	0.0
C22:1	Cetoleic Acid	34.84	3.6
C22:2N6	Docosadienoic Acid	0.47	0.0
C22:4N6	Adrenic Acid	0.31	0.0
C22:5N6	Docosapentaenoic Acid (n-6)	9.77	1.0
C22:5N3	Docosapentaenoic Acid (n-3)	49.22	5.1
C22:6N3 (DHA)	Docosahexaenoic Acid	250.84	26.2
C24:0	Lignoceric Acid	0.86	0.1
C24:1	Nervonic Acid	7.49	0.8
Total Fatty Acids		958.50	100.0

Saturated	68.53	7.2
Monounsaturated	163.67	17.1
Polyunsaturated	726.29	75.8

Omega-3	683.65	71.3
Omega-6	42.65	4.4

Method: AOCS Ce 1i-07

Dioxin and Furan (PCDD/F) Toxicity Summary

WHO TEQ (2005) Dioxin and Furan (PCDD/F):	Upper Bound	0.234 ppt
	Lower Bound	0.00 ppt

Dioxin-like PCB Toxicity Summary

WHO TEQ (2005) Toxic Dioxin-Like PCBs	Upper Bound	0.0262 ppt
	Lower Bound	0.0258 ppt

Dioxin, Furan & Dioxin-like PCB Toxicity Summary

WHO TEQs (2005) Total PCDD, PCDF & DL-PCB	Upper Bound	0.260 ppt
	Lower Bound	0.0258 ppt

Total PCB Summary (Method USEPA 1668 A/C)

Total PCBs	Upper Bound	1.20 ppb
	Lower Bound	1.16 ppb

Marker PCB Analysis (Method USEPA 1668 A/C)

Total (ICES-7) ¹ Marker PCBs:	Upper Bound	0.545 ppb
	Lower Bound	0.541 ppb

Heavy Metals

Component	Analytical Method	Specification	Result	Units	Meets Specification
Total Arsenic	USP 233 (ICP-MS)	< 0.1	0.0306	ppm	Yes
Cadmium	USP 233 (ICP-MS)	< 0.1	<0.0016	ppm	Yes
Lead	USP 233 (ICP-MS)	< 0.05	<0.0064	ppm	Yes
Mercury	USP 233 (CVAA)	< 0.1	<0.0120	ppm	Yes

Physical Properties

Component	Analytical Method	Specification	Result	Units	Meets Specification
Capsule Fill Weight	In-house	Not Applicable	1026.6	mg/cap	Not applicable

IFOS Test Summary

Contaminants

Test	Cut-off	Result	Compliance
Total PCBs	<= 45 ppb	1.20 ppb	Yes
Dioxin and Furan	<= 1 ppt	0.234 ppt	Yes
Dioxin-Like PCBs	<= 1.5 ppt	0.0262 ppt	Yes
Acid Value	<= 3 mg KOH/g	0.11 mg KOH/g	Yes
Peroxide	<= 5 meq/kg	1.43 meq/kg	Yes
Anisidine	<= 20	0.45	Yes
Total Oxidation	<= 19.5	3.31	Yes
Mercury	< 0.10 mg/kg	<0.0120 mg/kg	Yes
Lead	< 0.05 mg/kg	<0.0064 mg/kg	Yes
Total Arsenic	< 0.10 mg/kg	0.0306 mg/kg	Yes
Cadmium	< 0.10 mg/kg	<0.0016 mg/kg	Yes