

Certificate of Analysis

PRODUCT: OptiKrill 500 –60 ct
PRODUCT DESCRIPTION: Krill and BioMarine® Omega-3 Concentrate w/ Natural Lemon/Lime Flavor and Vitamin D
BATCH NO.: 1605041 (52781906, NKO-1510211)
LABEL LOT: **160412 05/2018**
PRODUCT NO: MNSG-400
DATE OF MANUFACTURE: May, 2016
BEST BEFORE/RETEST BY: May, 2018

General	Manufacturing Specification	Results	Method
Pharmaceutical Form	Reddish brown capsule containing a reddish oil	Conforms	Observation
Capsule size and shape	10 Oval	Conforms	Observation
Average Fill Weight	540 mg +/- 5%	540 mg	USP<2091>
Disintegration/Rupture time	Max. 15 minutes	Passed	USP<2040>
Acid Value ¹	Max. 3 mg KOH/g	0.4 mg KOH/g	Ph.Eur. 2.5.1
Peroxide Value ¹	Max. 5 meq/kg	1.1 meq/kg	Ph.Eur 2.5.5
Peroxide Value Finished Capsules ⁶	Max. 10 meq/kg	<0.2 meq/kg	AOCS Cd 8-53
Anisidine Value ¹	Max. 20	2	Ph.Eur. 2.5.36
Lead ¹	Max. 0.1 mg/kg	Conforms	External Laboratory*
Cadmium ¹	Max. 0.1 mg/kg	Conforms	External Laboratory*
Arsenic (inorganic) ¹	Max. 0.1 mg/kg	Conforms	External Laboratory*
Mercury ¹	Max. 0.1 mg/kg	Conforms	External Laboratory*
PCBs (209 Congeners) ¹	Max. 0.09 mg/kg	Conforms	External Laboratory*
Sum of Dioxins & Furans (17) ¹ -TEQ ²	Max. 1.75 pg/g	Conforms	External Laboratory*
Sum of Dioxins & Furans and Dioxin like PCBs ¹ – TEQ ²	Max. 3 pg/g	Conforms	External Laboratory*

Microbiological Standard	Manufacturing Specification	Result	Method
Total Plate Count	Max. 3,000 CFU/g	<3,000 CFU/g	USP<2021>
Total Mold & Yeast Count	Max. 300 CFU/g	<300 CFU/g	USP<2021>
<i>Salmonella</i>	Negative/10g	Negative/10g	USP<2022>
<i>E. coli</i>	Negative/10g	Negative/10g	USP<2022>
<i>Staphylococcus aureus</i>	Negative/10g	Negative/10g	USP<2022>

*See attached Analytical Report(s).

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Ingredients	Manufacturing Specification (per 1 soft gel)	Results	Method
Enriched Krill and Fish Oil Omega-3 Blend w/ Natural Lemon/Lime Flavor and Proprietary Antioxidant Blend ³	540 mg +/- 5%	540 mg	Input
Krill Oil	250 mg	250 mg	Input
Total Phospholipids	100 mg	97 mg	Input
EPA (as EE) ⁴	105 mg	123 mg	AOCS/GOED
DHA (as EE) ⁴	65 mg	79 mg	AOCS/GOED
Other Omega-3 (as EE) ⁴	Report	47 mg	AOCS/GOED
Additional Omega-3 ⁵ (as EE) ⁴	40 mg	79 mg	AOCS/GOED
Total Omega-3 Fatty Acids (as EE) ⁴	210 mg	249 mg	AOCS/GOED
Natural Astaxanthin (from Krill Oil and <i>Haematococcus pluvialis</i> Extract)	250 mcg	495 mcg	Input
Vitamin D (as D ₃ Cholecalciferol)	250 IU	385 IU	External laboratory
Shell Ingredients	Gelatin, Glycerin, Purified Water, Annatto Extract, Carob	Conforms	Input
Shell Hardness	Regular	Conforms	Input
Flavor coating	Lemon	Conforms	Input

¹Analysis performed on fish oil before the addition of other ingredients.

²Toxicity Equivalents according to WHO.

³**Additives:** A proprietary natural antioxidant blend (Natural Tocopherols, Rosemary Extract, and Ascorbyl Palmitate) and a proprietary natural lemon/lime flavoring have been added.

⁴Measured as Ethyl Ester. Any third party test result must be based on a laboratory using the CRN/GOED or European Pharmacopeia method. Results from other methods, such as AOAC, AOCS, USP or other methods, will not be recognized in a possible conflict of results. Results based on input, using values calculated from assay of the raw materials by the methods indicated. Results based on input, using values calculated from assay of the raw materials by the methods indicated.

⁵Additional Omega-3s include EPA and DHA above minimum specification as well as Other Omega-3s from line above.

⁶Peroxide Value on delivery to customer.

Ingredients: Enriched Krill and Fish Oil Omega-3 Blend consisting of Krill Oil and BioMarine® Fish Oil (krill, anchovy, sardine, mackerel), Capsule Shell (gelatin, glycerin, purified water, annatto extract, and carob), Natural lemon/lime Flavor, Proprietary Antioxidant Blend (natural tocopherols (soy), rosemary extract, and ascorbyl palmitate), and cholecalciferol.

Allergens: Contains highly refined fish oil, crustaceans and soybeans..



Caroline Lease, Quality
July 13, 2016