Quality Certification Program Results – Viva Labs Inc.

Omega-3 Supplement Review

Product Tested:

Viva Labs Krill Oil

Report Date: November 7, 2013

Brand Name: Viva Labs Krill Oil

Manufacturer/ Distributor
Dist. by Viva Labs Inc.

Units per Container
60 Caplique® capsules

Lot Number
50008140

Expiration Date
08/2015

Total Claimed Amount of EPA
82.5 mg per capsule

Total Claimed Amount of DHA
47.5 mg per capsule

Total Claimed Amount of Omega-3
150 mg per capsule

A.) Analytical Findings

Overall Testing: PASS

Serving size: 2 softgel
Average unit content weight 0.699 g

I. Lead
   Lab A: <0.1 μg/g (BLQ)* Pass

II. Mercury
   Lab A: <0.1 μg/g (BLQ)* Pass

III. Cadmium
   Lab A: <0.2 μg/g (BLQ)* Pass

IV. Inorganic Arsenic
   Lab A: <22 ng/g (BLQ)* Pass
V. Disintegration N/A

VI. EPA Pass
   Lab A: % of claimed found: 105.5% (87.0 mg/capsule)

VII. DHA Pass
   Lab A: % of claimed found: 107.4% (51.0 mg/capsule)

VIII. Omega-3 Pass
      Lab A: % of claimed found: 108.0% (162.0 mg/capsule)

IX. Peroxide Pass
    Lab A: <0.10 meq/kg

X. Anisidine Pass
    Lab A: 5.8 meq/kg

XI. TOTOX Pass
    Lab A: 5.8 meq/kg

XII. PCB Pass
     Lab A: TEQ: 15 ng/kg

XII. Dioxins Pass
     Lab A: TEQ: 0.0006 ng/kg

* Below Level of Quantitation

Testing Methods:
Omega-3 marine oil capsules and liquids were tested for identity and amounts of EPA, DHA and other claimed fatty acids, freshness (peroxide value, anisidine value, and TOTOX) and potential contamination with mercury, lead, cadmium, arsenic and PCBs. Optional dioxin testing.

All products were assessed in independent laboratories using the following methods: for EPA, DHA and other fatty acids components by gas chromatography utilizing a modified AOAC method (Association of Official Analytical Chemists, International; Official Method 991.39); for peroxide value using AOCS method (American Oil Chemists Society; Method CD 8-53 or similar); for anisidine value using AOCS method (Method CD 18-90 or similar); for mercury using a Cold Vapor Atomic Absorption method; for PCBs using High Resolution Gas Chromatography coupled with High Resolution Mass Spectrometry (EPA Method 1668A); and for lead using ICP-MS (Inductively Coupled Plasma-Mass Spectroscopy). Optional dioxin testing was performed using EPA method 1663B.

Products not passing the initial assay for EPA, DHA and other fatty acids, peroxide value, anisidine value, TOTOX and/or mercury or lead were tested in another independent laboratory utilizing a similar method.

Products were tested for their claimed amount of CoQ10 and/or ubiquinol. Analysis for CoQ10 and/or ubiquinol was performed using a modified HPLC method (USP method) without the final ferric chloride step in an independent laboratory.

Disintegration of non-chewable and non-time release formulations was analyzed utilizing USP (United States Pharmacopeia) <2040> recommendations.

The identities of the products were not disclosed to the laboratories performing the testing.
Passing Score: *
To achieve a "Pass" in the testing a product must meet the following criteria:

1. Contain 100% and not exceed 150% of the claimed amounts of EPA, DHA or other fatty acids.
2. Have a peroxide value (PV) of no more than 5 meq/kg, an anisidine value (AV) of no more than 20, and a TOTOX value of no more than 26 (calculated as \((2 \times \text{PV}) + \text{AV}\)) (GOED Monograph Recommendation).
3. Contain less than 0.1 ppm of mercury (GOED Monograph Recommendation).
4. Contain less than 0.1 ppm of cadmium (GOED Monograph Recommendation).
5. Contain less than 0.1 ppm inorganic arsenic (GOED Monograph Recommendation).
6. Meet the State of California's Prop 65 limits for lead in supplements: 0.5 mcg of lead per daily serving with an additional allowance of 1.0 mcg for supplements containing 1,000 mg/day or more of elemental calcium and 0.5 mcg for supplements containing specific other minerals. For supplements not marketed for use by children, ConsumerLab.com provides an additional allowance of 0.5 mcg if containing 250 to 499 mg/day of elemental calcium or 1.0 mcg if containing 500 to 999 mg/day of elemental calcium and an allowance of 0.5 mcg for if containing one whole herb (not extract) ingredient or 1.0 mcg for two or more whole herb ingredients. If a maximum recommended daily serving is not defined, a daily serving size will be determined and applied by CL.
7. Total PCBs (sum of all 209 congeners) of no more than 90,000 ng/kg on a weight/weight basis.
8. Dioxin-like PCBs include the sum of 4 individual non-ortho PCBs and 8 mono-ortho PCBs. For non-concentrated fish body oils (< 80% EPA & DHA (%wt/wt)) a limit of 3pg/g. (GOED) For fish body oil concentrates (> 80%), fish liver oil and oil from other marine organisms intended for human consumption a limit of 6 pg/g. (proposed EU).
9. If tested for dioxins: Total dioxin of no more than 1.5 pg WHO-PCDD/F-TEQ/g. Dioxin limit includes the sum of 17 individual congeners (dibenzo-para-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs)) defined by the WHO-toxic equivalent factors expressed as TEQ for all marine oils (fish body oils, fish liver oil and oil from other marine organisms intended for human consumption) (proposed EU).
10. Contain at least 100% of its labeled amount of CoQ10 and/or ubiquinol and no more than 150% of this amount.
11. Meet recommended USP disintegration parameters for enteric coated capsules (excluding regular capsules, chewable and time-release products).

A "Pass" was based on meeting the above criteria in either the first or second rounds of testing.

* Passing scores allow for specific margins of technical error associated with each analysis. ConsumerLab.com reserves the right to disqualify a product at any time from passing its testing if it considers such product to present a safety risk or to provide misleading or inaccurate information in its labeling.