

Certificate of Analysis

PRODUCT NAME: Joint Formula Supreme –100 ct
PRODUCT DESCRIPTION: BioMarine® Concentrated Fish Oil MOST Quality with
 Glucosamine, Chondroitin, MSM and Natural Lemon/Lime Flavor
PRODUCT NO.: MMSG-334
LOT NO: SB007527 (0013966047,0014404469)
LABEL LOT: 075271 05/2018
DATE OF MANUFACTURE: May, 2016
BEST BEFORE/RETEST BY: May, 2018

General	Manufacturing Specification	Results	Method
Pharmaceutical Form	Light brown colored soft gelatin capsules containing a mustard-colored suspension	Conforms	Observation
Capsule size and shape	20 Oblong	Conforms	Observation
Average Fill Weight	1065 mg +/- 5%	1072 mg	USP<2091>
Disintegration/Rupture Time	15 minutes	5 min.	USP<2040>
Acid Value ¹	Max. 3 mg KOH/g	0.1 mg KOH/g	Ph.Eur.2.5.1
Peroxide Value ¹	Max. 5 meq/kg	0.1 meq/kg	AOCS Cd 8-53
Peroxide Value Finished Softgels ⁶	Max. 10 meq/kg	<0.2 meq/kg	USP<401>
Anisidine Value ¹	Max. 20	4.8	Ph.Eur.2.5.36
Lead ¹	Max. 0.1 ppm	Passed	External laboratory*
Cadmium ¹	Max. 0.1 ppm	Passed	External laboratory*
Arsenic (inorganic) ¹	Max. 0.1 ppm	Passed	External laboratory*
Mercury ¹	Max. 0.1 ppm	Passed	External laboratory*
PCBs (209 Congeners) ¹	Max. 0.09 mg/kg	Passed	External laboratory*
Sum of Dioxins & Furans (17) ¹ -TEQ ²	Max. 1.75 pg/g	Passed	External laboratory*
Sum of Dioxins & Furans and Dioxin-like PCBs ¹ – TEQ ²	Max. 3 pg/g	Passed	External laboratory*

Microbiological Standard	Manufacturing Specification	Results	Method
Total Plate Count	Max. 3,000 CFU/g	<10 CFU/g	USP<2021>
Total Mold & Yeast Count	Max. 300 CFU/g	<10 CFU/g	USP<2021>
<i>Salmonella</i>	Negative/10g	Negative/10g	USP<2022>
<i>Escherichia 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 softgel)	Results	Method
BioMarine Fish Oil Concentrate, Ethyl Ester w/ Lemon/Lime and Proprietary Antioxidant Blend ³	445 mg +/- 5%	Conforms	Input
EPA (as EE) ⁴	150 mg	166 mg	Ph.Eur. 2.4.29/GOED/AOCS
DHA (as EE) ⁴	100 mg	109 mg	Ph.Eur. 2.4.29/GOED/AOCS
Other Omega-3s (as EE) ⁴	Report	64 mg	Ph.Eur. 2.4.29/GOED/AOCS
Additional Omega-3 ⁵ (as EE) ⁴	50 mg	89 mg	Ph.Eur. 2.4.29/GOED/AOCS
Total Omega-3s (as EE) ⁴	300 mg	339 mg	Ph.Eur. 2.4.29/GOED/AOCS
Glucosamine Sulfate	212.5 mg	215.5 mg	Input
Chondroitin Sulfate	150 mg	150 mg	Input
MSM (Methyl Sulfonyl Methane)	62.5 mg	64.4 mg	Input
Vitamin C (as Ascorbic Acid)	37.5 mg	43.1 mg	Input
Vitamin D (as D3)	37.5 IU	50.6 mg	Input
Vitamin B12 (as Cyanocobalamin)	18.75 mcg	22.5 mg	Input
Niacin (as Niacinamide)	3.75 mg	4.1 mg	Input
Proprietary Blend consisting of: Boswellia Extract, Bromelain Nettle Leaf Extract, Turmeric Extract Ginger Root Extract, Long Pepper Extract	50 mg	50 mg	Input
Flavor Coated	Natural Lemon/Lime	Conforms	Input

¹Analysis performed on 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. Marine will accept analytical results from the Eurofins lab in Des Moines, IA using either AOCS or GOED method. Analytical results using other methods or analytical results from other test labs will not be recognized in a possible conflict of results.

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

⁶Peroxide Value on delivery to customer.

Ingredients: Highly Refined and Concentrated Omega-3 Fish Oil, Capsule Shell (gelatin, glycerin, purified water, titanium dioxide, caramel color), Glucosamine Sulfate, Chondroitin Sulfate, Potassium Chloride, Methyl Sulfonyl Methane, Proprietary Blend (Boswellia Serrata Extract (resin), Bromelain (from pineapple), Nettle Extract (leaf), Turmeric Extract (root), Ginger Root Extract (root), Long Pepper Extract (fruit)), Beeswax, Ascorbic Acid, Lecithin (soy), Natural Lemon/Lime Flavor, Niacinamide, Cyanocobalamin, Proprietary Antioxidant Blend (rosemary extract, ascorbyl palmitate and natural tocopherols (soy)), cholecalciferol.



 Caroline Lease, Quality
 July 14, 2016