

Certificate of Analysis

University of California, Davis

1 Shields Ave, Meyer Hall Rm 2218
 Davis California 95616 United States

Sample Name:	Fish Oil	Covance Sample:	6048826
Project ID	UCDAVIS-20170412-0001	Receipt Date	11-Apr-2017
PO Number	CVD	Receipt Condition	Cold on Wet Ice or Ice Packs
Lot Number	Jedwards 5210001	Login Date	12-Apr-2017
Sample Serving Size	100 mL	Online Order	11527-D9E5676
Description	opened 10/12/16		

Analysis
Result
Fatty Acids Calculated as Triglycerides

Saturated Fatty Acids (Acid Form)	22.1 g/Serving Size
Total Cis Unsaturated Fatty Acids (Acid Form)	53.4 g/Serving Size
Monounsaturated Fatty Acids (Acid Form)	17.9 g/Serving Size
Polyunsaturated Fatty Acids (Acid Form)	35.6 g/Serving Size
Trans Fatty Acids (Acid Form)	0.752 g/Serving Size
Omega 3 Fatty Acids	32.6 g/Serving Size
Omega 6 Fatty Acids	4.55 g/Serving Size
Omega 9 Fatty Acids	8.65 g/Serving Size
Total Fatty Acids	79.7 g/Serving Size
4:0 Butyric	<0.065 g/Serving Size
6:0 Caproic	<0.065 g/Serving Size
8:0 Caprylic	<0.065 g/Serving Size
10:0 Capric	<0.065 g/Serving Size
12:0 Lauric	0.0958 g/Serving Size
14:0 Myristic	6.19 g/Serving Size
14:1 Myristoleic	<0.065 g/Serving Size
15:0 Pentadecanoic	0.467 g/Serving Size
15:1 Pentadecenoic	<0.065 g/Serving Size
16:0 Palmitic	13.0 g/Serving Size
16:1 Palmitoleic	7.17 g/Serving Size
17:0 Heptadecanoic	0.388 g/Serving Size
17:1 Heptadecenoic	<0.065 g/Serving Size
18:0 Stearic	2.72 g/Serving Size
9c 18:1 Oleic	7.40 g/Serving Size
18:2 Linoleic	2.69 g/Serving Size
18:3 Gamma Linolenic	0.225 g/Serving Size
18:3 Linolenic	0.555 g/Serving Size
18:4 Octadecatetraenoic	2.25 g/Serving Size
20:0 Arachidic	0.199 g/Serving Size
20:1 Eicosenoic	0.765 g/Serving Size
20:2 Eicosadienoic	0.146 g/Serving Size
20:3 Eicosatrienoic (n3)	<0.065 g/Serving Size
20:3 Homogamma Linolenic (n6)	0.136 g/Serving Size
20:4 Arachidonic (n3)	0.620 g/Serving Size
20:4 Arachidonic (n6)	0.918 g/Serving Size
20:5 Eicosapentaenoic	14.7 g/Serving Size
21:5 Heneicosapentaenoic	0.591 g/Serving Size

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Sample Serving Size	100 mL	Online Order	11527-D9E5676
Description	opened 10/12/16		

Analysis	Result
Fatty Acids Calculated as Triglycerides	
22:0 Behenic	0.165 g/Serving Size
22:1 Erucic	0.124 g/Serving Size
22:2 Docosadienoic	<0.065 g/Serving Size
22:3 Docosatrienoic	<0.065 g/Serving Size
22:4 Docosatetraenoic	0.0985 g/Serving Size
22:5 Docosapentaenoic (n3)	1.72 g/Serving Size
22:5 Docosapentaenoic (n6)	0.335 g/Serving Size
22:6 Docosahexaenoic	12.1 g/Serving Size
24:0 Lignoceric	<0.065 g/Serving Size
24:1 Nervonic	0.356 g/Serving Size
Total 18:1 trans	0.242 g/Serving Size
Total 18:1 cis	10.3 g/Serving Size
Total 18:2 trans	0.338 g/Serving Size
Total 18:3 trans	0.205 g/Serving Size
Specific Gravity	
Density	0.931 g/mL
P-Anisidine Value	
P-Anisidine Value	12.0
Peroxide Value	
Peroxide Value	15.25 Meq/kg of fat

Method References	Testing Location
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Fatty Acids Calculated as Triglycerides (FALT_S)	Covance Laboratories - Madison
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Official Method No. 996.06, Official Methods of Analysis of the AOAC INTERNATIONAL (modified), 19th Ed., AOAC INTERNATIONAL: Gaithersburg, Maryland (2012).

Official Methods and Recommended Practices of the AOCS, Official methods Ce 2b-11 (2011), Ce 1h-05 (2009), Ce 1j-07 (2013), Ce 2-66 (2009), The American Oil Chemists' Society, Champaign, IL (modified).

P-Anisidine Value (ANID_S)	Covance Laboratories - Madison
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Official Methods and Practices of the American Oil Chemists' Society 5th Edition, AOCS Official Method Cd 18-90, American Oil Chemists' Society, Champaign, IL (1997)

United States Pharmacopeia, Thirty-second Revision, <401 Fats & Fixed Oils>, USP Convention, Inc., Rockville, MD (2010).

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Method References

Testing Location

Peroxide Value (PVFF_S)

Covance Laboratories - Madison

American Oil Chemists' Society, Cd 8-53 Peroxide Value Acetic Acid-Chloroform Method (modified), Official Methods and Recommended Practices of AOCS, Fifth Ed., American Oil Chemists' Society, Champaign, IL (2003).
United States Pharmacopeia, 34th Rev., <401> Fats & Fixed Oils, USP Convention, Inc., p. 153, Rockville, MD (2011).
Lipid extraction: Official Methods of Analysis of the AOAC International, 18th edition, Rev 4, Official Method 983.23. AOAC International, Gaithersburg, MD. 2005 (modified).

Specific Gravity (SPGP_S)

Covance Laboratories - Madison

NIST Handbook 133 - Checking the Net Contents of Packaged Goods, 2015 Edition (Modified)

Testing Location(s)

Released on Behalf of Covance by

Covance Laboratories - Madison

Edward Ladwig - Director

Covance Laboratories Inc.
3301 Kinsman Blvd
Madison WI 53704
800-675-8375



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Sample Name:	Vegetable Oil	Covance Sample:	6048836
Project ID	UCDAVIS-20170412-0001	Receipt Date	11-Apr-2017
PO Number	CVD	Receipt Condition	Cold on Wet Ice or Ice Packs
Lot Number	Wesson Best Blend	Login Date	12-Apr-2017
Sample Serving Size	100 mL	Online Order	11527-D9E5676
Description	open 02/27/17		

Analysis
Result
Fatty Acids Calculated as Triglycerides

Saturated Fatty Acids (Acid Form)	10.2 g/Serving Size
Total Cis Unsaturated Fatty Acids (Acid Form)	71.7 g/Serving Size
Monounsaturated Fatty Acids (Acid Form)	33.9 g/Serving Size
Polyunsaturated Fatty Acids (Acid Form)	37.8 g/Serving Size
Trans Fatty Acids (Acid Form)	1.36 g/Serving Size
Omega 3 Fatty Acids	5.63 g/Serving Size
Omega 6 Fatty Acids	33.8 g/Serving Size
Omega 9 Fatty Acids	33.4 g/Serving Size
Total Fatty Acids	87.1 g/Serving Size
4:0 Butyric	<0.064 g/Serving Size
6:0 Caproic	<0.064 g/Serving Size
8:0 Caprylic	<0.064 g/Serving Size
10:0 Capric	<0.064 g/Serving Size
12:0 Lauric	<0.064 g/Serving Size
14:0 Myristic	<0.064 g/Serving Size
14:1 Myristoleic	<0.064 g/Serving Size
15:0 Pentadecanoic	<0.064 g/Serving Size
15:1 Pentadecenoic	<0.064 g/Serving Size
16:0 Palmitic	7.10 g/Serving Size
16:1 Palmitoleic	0.120 g/Serving Size
17:0 Heptadecanoic	0.067 g/Serving Size
17:1 Heptadecenoic	<0.064 g/Serving Size
18:0 Stearic	2.82 g/Serving Size
9c 18:1 Oleic	32.1 g/Serving Size
18:2 Linoleic	33.8 g/Serving Size
18:3 Gamma Linolenic	<0.064 g/Serving Size
18:3 Linolenic	5.63 g/Serving Size
18:4 Octadecatetraenoic	<0.064 g/Serving Size
20:0 Arachidic	0.380 g/Serving Size
20:1 Eicosenoic	1.12 g/Serving Size
20:2 Eicosadienoic	<0.064 g/Serving Size
20:3 Eicosatrienoic (n3)	<0.064 g/Serving Size
20:3 Homogamma Linolenic (n6)	<0.064 g/Serving Size
20:4 Arachidonic (n3)	<0.064 g/Serving Size
20:4 Arachidonic (n6)	<0.064 g/Serving Size
20:5 Eicosapentaenoic	<0.064 g/Serving Size
21:5 Heneicosapentaenoic	<0.064 g/Serving Size

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Description	open 02/27/17		

Analysis	Result
Fatty Acids Calculated as Triglycerides	
22:0 Behenic	0.302 g/Serving Size
22:1 Erucic	<0.064 g/Serving Size
22:2 Docosadienoic	<0.064 g/Serving Size
22:3 Docosatrienoic	<0.064 g/Serving Size
22:4 Docosatetraenoic	<0.064 g/Serving Size
22:5 Docosapentaenoic (n3)	<0.064 g/Serving Size
22:5 Docosapentaenoic (n6)	<0.064 g/Serving Size
22:6 Docosahexaenoic	<0.064 g/Serving Size
24:0 Lignoceric	0.113 g/Serving Size
24:1 Nervonic	0.120 g/Serving Size
Total 18:1 trans	<0.064 g/Serving Size
Total 18:1 cis	34.1 g/Serving Size
Total 18:2 trans	0.586 g/Serving Size
Total 18:3 trans	0.832 g/Serving Size
Specific Gravity	
Density	0.921 g/mL
P-Anisidine Value	
P-Anisidine Value	1.45
Peroxide Value	
Peroxide Value	0.70 Meq/kg of fat

Method References	Testing Location
Fatty Acids Calculated as Triglycerides (FALT_S)	Covance Laboratories - Madison
Official Method No. 996.06, Official Methods of Analysis of the AOAC INTERNATIONAL (modified), 19th Ed., AOAC INTERNATIONAL: Gaithersburg, Maryland (2012).	
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P-Anisidine Value (ANID_S)	Covance Laboratories - Madison
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Method References

Testing Location

Peroxide Value (PVFF_S)

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