NATURAL HEALTH PRODUCT

MULTIPLE INGREDIENT FIXED OIL PRODUCTS – ORAL

This monograph is intended to serve as a guide to industry for the preparation of Product Licence Applications (PLAs) for natural health product (NHP) market authorization of multiple ingredient oil products that contain one or more of the medicinal ingredients listed in Table 1. The monograph is not intended to be a comprehensive review of the medicinal ingredients.

Essential/volatile oil preparations (e.g. those prepared by distillation) are not within the scope of this monograph.

Hydrogenated oils and partially hydrogenated oils are not within the scope of this monograph.

Notes

Text in parentheses is additional optional information which can be included on the PLA and product label at the applicant’s discretion.

The solidus (/) indicates that the terms or statements are synonymous. Either term or statement may be selected by the applicant.

Date January 7, 2015

Proper name(s), Common name(s), and Source material(s)

Table 1: Proper name(s), common name(s) and source material(s) of medicinal ingredients

<table>
<thead>
<tr>
<th>Proper name(s)</th>
<th>Common name(s)</th>
<th>Source material(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Borago officinalis</em></td>
<td>Borage oil</td>
<td>Seed (Martindale 2012; Hoffmann 2003)</td>
</tr>
<tr>
<td><em>Brassica napus</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Brassica juncea</em></td>
<td>• Canola oil</td>
<td>Seed (FCC 2014)</td>
</tr>
<tr>
<td><em>Brassica rapa</em></td>
<td>• Rapeseed oil</td>
<td></td>
</tr>
<tr>
<td><em>Camelina sativa</em></td>
<td>False flax oil</td>
<td>Seed (Dubois et al. 2007)</td>
</tr>
<tr>
<td><em>Cannabis sativa</em></td>
<td>Hemp seed oil</td>
<td>Seed (Callaway et al. 2005)</td>
</tr>
<tr>
<td><em>Carthamus tinctorius</em></td>
<td>Safflower oil</td>
<td>Seed (USP 37)</td>
</tr>
<tr>
<td><em>Cocos nucifera</em></td>
<td>Coconut oil</td>
<td>Seed endosperm (FCC 2014)</td>
</tr>
<tr>
<td>Cod liver oil</td>
<td>Cod liver oil</td>
<td>As per NNHPD Cod liver oil monograph</td>
</tr>
<tr>
<td><em>Cucurbita pepo var. pepo</em></td>
<td>Pumpkin seed oil</td>
<td>Seed (Dubois et al. 2007)</td>
</tr>
<tr>
<td>Ingredient</td>
<td>Description</td>
<td>Additional Information</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Fish oil</td>
<td></td>
<td>As per NNHPD Fish oil monograph</td>
</tr>
<tr>
<td><em>Helianthus annuus</em></td>
<td>Sunflower seed oil, Sunflower oil</td>
<td>Seed (FCC 2014)</td>
</tr>
<tr>
<td><em>Hippophae rhamnoides</em></td>
<td>Sea buckthorn seed oil</td>
<td>Seed (Yang <em>et al.</em> 1999)</td>
</tr>
<tr>
<td>Krill oil</td>
<td>Krill oil</td>
<td>As per NNHPD Krill oil monograph</td>
</tr>
<tr>
<td><em>Linum usitatissimum</em></td>
<td>Flax oil, Flaxseed oil, Linseed oil</td>
<td>As per NNHPD Flaxseed oil monograph</td>
</tr>
<tr>
<td><em>Oenothera biennis</em></td>
<td>Evening primrose oil</td>
<td>As per NNHPD Evening Primrose oil monograph</td>
</tr>
<tr>
<td><em>Olea europaea</em></td>
<td>Olive oil</td>
<td>Fruit (NF 32)</td>
</tr>
<tr>
<td><em>Prunus dulcis var. dulcis</em></td>
<td>Almond oil, Sweet almond oil</td>
<td>Kernel (NF 32)</td>
</tr>
<tr>
<td><em>Ribes nigrum</em></td>
<td>Blackcurrant seed oil</td>
<td>Seed (Linnamaa <em>et al.</em> 2010)</td>
</tr>
<tr>
<td><em>Salvia hispanica</em></td>
<td>Chia seed oil</td>
<td>Seed (Dubois <em>et al.</em> 2007)</td>
</tr>
<tr>
<td><em>Schizochytrium</em> spp.</td>
<td>Schizochytrium Oil</td>
<td><em>Schizochytrium</em> spp. (Yurko-Mauro <em>et al.</em> 2010)</td>
</tr>
<tr>
<td>Seal oil</td>
<td>Seal oil</td>
<td>As per NNHPD Seal oil monograph</td>
</tr>
</tbody>
</table>
| Squid oil  | Squid oil   | *Todarodes pacificus* - whole (ITIS 2014) *
|           |             | *Docidicus gigas* - whole (ITIS 2014) *
|           |             | *Illex argentinus* - whole (ITIS 2014) *
|           |             | *Illex illecebrosus* - whole (ITIS 2014) |
| *Triticum aestivum* | Wheatgerm oil, Wheat germ oil | Germ (Ph.Eur 2013) |
| *Vitis vinifera* | Grape seed oil | Seed (Dubois *et al.* 2007) |

Route(s) of administration

Oral

Dosage form(s)

- The acceptable pharmaceutical dosage forms include, but are not limited to capsules, chewables (e.g. tablets), liquids, powders, strips or tablets.
- This monograph is not intended to include foods or food-like dosage forms such as bars, chewing gums, beverages, cooking oil, and salad oil.
### Use(s) or Purpose(s) Statement(s) to the effect of

#### Table 2: Recommended Use(s) or Purpose(s) based on Fatty Acid Content

<table>
<thead>
<tr>
<th>Required Fatty Acid Constituents¹</th>
<th>Minimum Daily Dose² (mg per day)</th>
<th>Recommended Use(s) or Purpose(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA (Linoleic acid)</td>
<td>850</td>
<td>• Source of linolenic acid (LA) for the maintenance of good health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Source of omega-6 fatty acid for the maintenance of good health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Source of an essential fatty acid for the maintenance of good health</td>
</tr>
<tr>
<td>ALA (Alpha-linoleic acid)</td>
<td>80</td>
<td>• Source of alpha-linolenic acid (ALA) for the maintenance of good health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Source of omega-3 fatty acid for the maintenance of good health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Source of an essential fatty acid for the maintenance of good health</td>
</tr>
<tr>
<td>LA + ALA</td>
<td>850 LA + 80 ALA</td>
<td>Source of essential fatty acids for the maintenance of good health</td>
</tr>
<tr>
<td>EPA + DHA + DPA (Eicosapentaenoic acid + Docosahexaenoic acid + Docosapentaenoic acid (n-3))</td>
<td>100 EPA+DHA+DPA</td>
<td>Source of omega-3 fatty acids for the maintenance of good health</td>
</tr>
<tr>
<td>EPA</td>
<td>100</td>
<td>Source of eicosapentaenoic acid (EPA) for the maintenance of good health</td>
</tr>
<tr>
<td>DHA</td>
<td>100</td>
<td>Source of docosahexaenoic acid (DHA) for the maintenance of good health</td>
</tr>
<tr>
<td></td>
<td>250</td>
<td>• Helps support/maintain eye health/function</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Helps support/maintain visual health/function</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Helps support/maintain normal brain function</td>
</tr>
<tr>
<td>DPA</td>
<td>100</td>
<td>Source of docosapentaenoic acid (DPA) for the maintenance of good health</td>
</tr>
<tr>
<td>EPA+DHA</td>
<td>250 EPA+DHA</td>
<td>Helps support/maintain (normal) heart/cardiovascular health/function</td>
</tr>
<tr>
<td></td>
<td>2000 EPA+DHA</td>
<td>Helps to support/maintain normal serum/blood triglyceride/triaclylglycerol levels</td>
</tr>
<tr>
<td>GLA (Gamma-linoleic)</td>
<td>100</td>
<td>Source of gamma-linoleic acid</td>
</tr>
</tbody>
</table>

¹ Required Fatty Acid Constituents

² Minimum Daily Dose
Multiple Ingredient Fixed oil products – oral

<table>
<thead>
<tr>
<th>Medicinal ingredient</th>
<th>Maximum Daily Dose (g per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Borago officinalis</em>/Borage oil</td>
<td>As per NNHPD Borage Oil monograph</td>
</tr>
<tr>
<td><em>Brassica napus</em>/B. juncea*/B. rapa*/Canola oil</td>
<td>15.0 (NNHPD 2014)</td>
</tr>
<tr>
<td><em>Camelina sativa</em>/False flax Oil</td>
<td>15.0 (NNHPD 2014)</td>
</tr>
</tbody>
</table>

1 For products making claims from this table, the potencies must be indicated for the relevant fatty acid constituents. Refer to Appendix I for guidance on potency constituents and their percentages.
2 At least one of the following references was used to support the minimum dose and recommended uses or purposes: NNHPD 2014; EFSA 2010a; EFSA 2010b; EFSA 2009; Simopolous 2007; IOM 2006; IOM 2002; Simopolous 1999;

*Products containing Coconut oil, Olive oil and/or Wheat germ oil*


*Products containing Schizochytrium Oil, Borage oil, Cod liver oil, Fish oil, Krill oil, Evening Primrose oil, Seal oil and/or Cognitive Functions products*

Claims permitted as per the other NNHPD monographs for these ingredients. Individual monograph respective doses and potencies apply.

**Dose(s)**

**Subpopulation**

*All Products*

Adults (≥18 years)

*Products containing Fish oil, Flaxseed oil, Seal oil and/or Cod liver oil*

As per their respective NNHPD monographs.

**Preparations**

Oil fixed; Oil fixed standardized

Table 3: Maximum Daily Doses of Medicinal Ingredients
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Daily dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannabis sativa/Hemp seed oil</td>
<td>15.0 (NNHPD 2014)</td>
</tr>
<tr>
<td>Carthamus tinctorius/Safflower seed oil</td>
<td>15.0 (NNHPD 2014)</td>
</tr>
<tr>
<td>Cocos nucifera/Coconut oil</td>
<td>15.0 (NNHPD 2014)</td>
</tr>
<tr>
<td>Cod liver oil</td>
<td>As per NNHPD Cod Liver Oil monograph</td>
</tr>
<tr>
<td>Cucurbita pepo var. pepo/Pumpkin seed oil</td>
<td>15.0 (NNHPD 2014)</td>
</tr>
<tr>
<td>Fish oil</td>
<td>As per NNHPD Fish Oil monograph</td>
</tr>
<tr>
<td>Helianthus annuus/Sunflower seed oil</td>
<td>15.0 (NNHPD 2014)</td>
</tr>
<tr>
<td>Hippophae rhamnoides/Sea buckthorn seed oil</td>
<td>5.0 (Yang et al. 1999)</td>
</tr>
<tr>
<td>Krill oil</td>
<td>As per NNHPD Krill Oil monograph</td>
</tr>
<tr>
<td>Linum usitatissimum/Flaxseed oil</td>
<td>As per NNHPD Flaxseed Oil monograph</td>
</tr>
<tr>
<td>Oenothera biennis/Evening primrose oil</td>
<td>As per NNHPD Evening Primrose Oil monograph</td>
</tr>
<tr>
<td>Olea europaea/Olive oil</td>
<td>15.0 (NNHPD 2014)</td>
</tr>
<tr>
<td>Prunus dulcis var. dulcis/Almond oil</td>
<td>15.0 (NNHPD 2014)</td>
</tr>
<tr>
<td>Ribes nigrum/Blackcurrant seed oil</td>
<td>10.5 (Leventhal et al. 1994)</td>
</tr>
<tr>
<td>Salvia hispanica/Chia seed oil</td>
<td>4.5 (NNHPD 2014)</td>
</tr>
<tr>
<td>Schizochytrium spp./Schizochytrium Oil</td>
<td>A quantity of oil providing no more than 2000 mg DHA/day (Quinn et al. 2010)</td>
</tr>
<tr>
<td>Seal oil</td>
<td>As per NNHPD Seal Oil monograph</td>
</tr>
<tr>
<td>Squid oil</td>
<td>5.0 (NNHPD 2014)</td>
</tr>
<tr>
<td>Triticum aestivum/Wheatgerm oil</td>
<td>15.0 (NNHPD 2014)</td>
</tr>
<tr>
<td>Vitis vinifera/Grape seed oil</td>
<td>15.0 (NNHPD 2014)</td>
</tr>
</tbody>
</table>

**Direction(s) for use**

No statement required.

**Combination rules and restrictions**

All medicinal ingredients included in this monograph may be combined with the following restrictions:

- The combined maximum daily dose of oils in a product must not exceed 15.0 g per day (NNHPD 2014).
- Maximum daily doses for individual medicinal ingredient as per Table 2 apply.
The combined maximum daily dose of EPA+DHA+DPA in a single product must not exceed 5.0 g per day (EFSA 2012).

Maximum daily doses of EPA+DHA+DPA for Schizochytrium Oil apply.

Maximum daily doses of EPA+DHA+DPA for Krill oil, Fish Oil, and Seal Oil apply as per individual NNHPD respective monographs.

Maximum daily doses of EPA+DHA, Vitamin A and Vitamin D for Cod liver oil apply as per the NNHPD Cod liver oil monograph.

Duration(s) of Use

No statement required.

Risk Information

Statement(s) to the effect of Caution(s) and warnings(s)

Products containing Hemp seed oil, Sea buckthorn seed oil, Krill oil, Blackcurrant seed oil and/or Squid oil

If you are pregnant or breastfeeding, consult a health care practitioner prior to use.

Contraindication(s)

No statements required.

Known adverse reaction(s)

Products containing Krill oil and/or Squid oil

Hypersensitivity/allergy has been known to occur (with shellfish); if this occurs, discontinue use (Martindale 2012).

Non-medicinal ingredients

Must be chosen from the current NNHPD Natural Health Products Ingredient Database (NHPID) and must meet the limitations outlined in that database.

Storage conditions

All products

Store in an airtight container, in a cool place, protected from light (Ph.Eur. 2012; USP 35).
Products containing Schizochytrium oil, False flax oil, Hemp seed oil, Cod liver oil, Fish oil, Sea buckthorn seed oil, Krill oil, Flaxseed oil, Black current seed oil, Chia seed oil, Seal oil and Squid Oil except those encapsulated

Refrigerate after opening (Wille and Gonus 1989).

Specifications

- The finished product specifications must be established in accordance with the requirements described in the NNHPD Quality of Natural Health Products Guide. Cod liver oil, Fish oil, Krill oil, Seal oil and Squid oil are considered marine oils and therefore Section 3.3.8 Contaminants in marine oils of the NNHPD Quality of Natural Health Products Guide applies to products containing these ingredients.
- Section 3.3.11 Oxidative stability in oils of the NNHPD Quality of Natural Health Products Guide applies to all products containing any medicinal ingredient on this monograph.
- The medicinal ingredients must comply with the requirements outlined in the NHPID. In addition, the medicinal ingredient may comply with the specifications published in the American (USP), British (BP) and/or European (Ph.Eur.) Pharmacopoeias.
- Products containing Hemp seed oil must contain no greater than 10 ppm of delta-9-tetrahydrocannabinol (THC), and their production must be in compliance with the Industrial Hemp Regulations (GC 2014).
- For all products indicating one or more of the potencies listed in the dose section, an assay must be performed in order to confirm the potency(ies).
- For the following ingredients please see the respective NNHPD monographs for additional quality requirements: Borage oil, Cod liver oil, Fish oil, Krill Oil, Flaxseed oil, Evening Primrose Oil, Seal oil.

References cited


EFSA 2010a. Scientific Opinion on the substantiation of health claims related to docosahexaenoic acid (DHA) and maintenance of normal (fasting) blood concentrations of triglycerides (ID 533, 691, 3150), protection of blood lipids from oxidative damage (ID 630), contribution to the maintenance or achievement of a normal body weight (ID 629), brain, eye and nerve development (ID 627, 689, 704, 742, 3148, 3151), maintenance of normal brain function (ID 565, 626, 631, 689, 690, 704, 742, 3148, 3151), maintenance of normal vision (ID 627, 632, 743, 3149) and maintenance of normal spermatozoa motility (ID 628) pursuant to Article 13(1) of Regulation (EC) No 1924/20061. EFSA Panel on Dietetic Products, Nutrition
EFSA 2010b. Scientific Opinion on the substantiation of health claims related to eicosapentaenoic acid (EPA), docosahexaenoic acid (DHA), docosapentaenoic acid (DPA) and maintenance of normal cardiac function (ID 504, 506, 516, 527, 538, 703, 1128, 1317, 1324, 1325), maintenance of normal blood glucose concentrations (ID 506), maintenance of normal blood pressure (ID 506, 516, 703, 1317, 1324), maintenance of normal blood HDL-cholesterol concentrations (ID 506), maintenance of normal (fasting) blood concentrations of triglycerides (ID 506, 527, 538, 1317, 1324, 1325), maintenance of normal blood LDL-cholesterol concentrations (ID 527, 538, 1317, 1325, 4689), protection of the skin from photo-oxidative (UV-induced) damage (ID 530), improved absorption of EPA and DHA (ID 522, 523), contribution to the normal function of the immune system by decreasing the levels of eicosanoids, arachidonic acid-derived mediators and pro-inflammatory cytokines (ID 520, 2914), and “immunomodulating agent” (4690) pursuant to Article 13(1) of Regulation (EC) No 1924/2006. EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA). EFSA Journal 2010; 8(10):1796. [Internet] [Accessed 2014 September 26]. Available from: http://www.efsa.europa.eu/en/efsajournal/doc/1796.pdf.


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Multiple Ingredient Fixed oil products – oral


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Frais AT. Depression and the causal role of specific memory system degenerations: Link may be supported by reported therapeutic benefits of omega 3 fatty acids. Medical Hypothesis 2007; 69(1):67-69.


Multiple Ingredient Fixed oil products – oral


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Manku MS, Horrobin DF, Morse N, Kyte V, Jenkins K. Reduced levels of prostaglandin precursors in the blood of atopic patients: defective delta-6-desaturase function as a biochemical basis for atopy. Prostaglandins, Leukotrienes and Medicine 1982;9(6):615-628.


Miller LG. Herbal medicinals: selected clinical considerations focusing on known or potential drug-herb interactions. Archives of Internal Medicine 1998;158(20):2200-2211.

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Murphy MG, Wright V, Ackman RG, Horackova M. Diets enriched in menhaden fish oil, seal oil, or shark liver oil have distinct effects on the lipid and fatty-acid composition of guinea pig heart. Molecular and Cellular Biochemistry 1997;177(1-2):257-269.


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Multiple Ingredient Fixed oil products – oral   Page 32 of 42
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Sanders TA, Lewis F, Slaughter S, Griffin BA, Griffin M, Davies I, Millward DJ, Cooper JA, Miller GJ. Effect of varying the ratio of n-6 to n-3 fatty acids by increasing the dietary intake of alpha-linolenic acid, eicosapentaenoic and docosahexaenoic acid or both on fibrinogen and clotting factors VII and XII in persons aged 45-70 y: the OPTILIP Study. The American Journal of Clinical Nutrition 2006;84(3):513-522.


Simmer K, Schulzke SM, Patole S. Longchain polyunsaturated fatty acid supplementation in preterm infants. Cochrane Database of Systematic Reviews Issue 1 Art. No.:CD000375. DOI: 10.1002/14651858.CD000375pub3; 2008.


Turchini GM, NG WK, Tocher DR, editors. Fish oil replacement and alternative lipid sources in aquaculture feeds. Boca Raton (FL): Taylor and Francis Group; 2011


<table>
<thead>
<tr>
<th>Medicinal ingredient</th>
<th>Linoleic acid 18:2 (n-6) (LA)</th>
<th>Alpha-linolenic acid 18:3(n-3) (ALA)</th>
<th>Eicosapentaenoic acid 20:5(n-3) (EPA)</th>
<th>Docosahexaenoic acid 22:6(n-3) (DHA)</th>
<th>Docosapentaenoic acid 22:5(n-3) (DPA)</th>
<th>Gamma-linolenic acid 18:3(n-6) (GLA)</th>
<th>Oleic acid 18:1(n-9) (OA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizochytrium Oil</td>
<td>--</td>
<td>--</td>
<td>Up to 3.9</td>
<td>22-55</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Borage seed oil</td>
<td>23-37</td>
<td>0.2-10</td>
<td>--</td>
<td>--</td>
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<td>18-27</td>
<td>12-22</td>
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<td>Canola seed oil</td>
<td>16-40</td>
<td>6-14</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>50-67</td>
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<tr>
<td>Camelina seed oil</td>
<td>15-25</td>
<td>29-40</td>
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<td>--</td>
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<td>--</td>
<td>11-36</td>
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<tr>
<td>Hemp seed oil</td>
<td>49-70</td>
<td>12-25</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1-6</td>
<td>8-16</td>
</tr>
<tr>
<td>Safflower seed oil</td>
<td>7-84</td>
<td>Up to 1.5</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>7-84</td>
</tr>
<tr>
<td>Coconut oil</td>
<td>1-4</td>
<td>Up to 0.2</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1-10</td>
</tr>
<tr>
<td>Cod liver oil</td>
<td>0.5-3</td>
<td>Up to 2</td>
<td>7-16</td>
<td>6-18</td>
<td>--</td>
<td>--</td>
<td>12-21</td>
</tr>
<tr>
<td>Pumpkin seed oil</td>
<td>42-71</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>17-47</td>
</tr>
<tr>
<td>Fish oil</td>
<td>--</td>
<td>--</td>
<td>Minimum 4</td>
<td>Minimum 9</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Sunflower seed oil</td>
<td>20-75</td>
<td>Up to 0.5</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>14-65</td>
</tr>
<tr>
<td>Sea buckthorn seed oil</td>
<td>29-44</td>
<td>20-39</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>12-27</td>
</tr>
<tr>
<td>Krill oil</td>
<td>1.4-3</td>
<td>0.5-3.5</td>
<td>14-22.1</td>
<td>7.5-13.2</td>
<td>Up to 0.7</td>
<td>--</td>
<td>7-14.5</td>
</tr>
<tr>
<td>Flaxseed oil</td>
<td>11-24</td>
<td>35-65</td>
<td>--</td>
<td>--</td>
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<td>--</td>
<td>11-35</td>
</tr>
<tr>
<td>Ingredient</td>
<td>MI Range</td>
<td>Typical Amount</td>
<td>Min</td>
<td>Max</td>
<td>Typical Min</td>
<td>Typical Max</td>
<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Evening primrose oil</td>
<td>65-85</td>
<td>Up to 0.5</td>
<td>--</td>
<td>--</td>
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<tr>
<td>Olive oil</td>
<td>3.5-20</td>
<td>Up to 1.2</td>
<td>--</td>
<td>--</td>
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</tr>
<tr>
<td>Almond oil</td>
<td>10-30</td>
<td>Up to 0.4</td>
<td>--</td>
<td>--</td>
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</tr>
<tr>
<td>Black currant seed oil</td>
<td>30-49</td>
<td>11-34</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>11-23</td>
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</tr>
<tr>
<td>Chia seed oil</td>
<td>16-23</td>
<td>52-69</td>
<td>--</td>
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<td></td>
</tr>
<tr>
<td>Seal oil</td>
<td>Up to 1.5</td>
<td>Up to 2.1</td>
<td>3-8</td>
<td>7-13</td>
<td>3-5</td>
<td>--</td>
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<tr>
<td>Squid oil</td>
<td>--</td>
<td>Minimum 5</td>
<td>Minimum 18</td>
<td>--</td>
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<tr>
<td>Wheatgerm oil</td>
<td>52-59</td>
<td>3-10</td>
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<tr>
<td>Grape seed oil</td>
<td>53-76</td>
<td>Up to 1.8</td>
<td>--</td>
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</tr>
</tbody>
</table>

1 All acceptable potency constituents are listed for each of the respective MIs along with their typical amounts (shown as a percentage). The percentage range for an indicated constituent is provided as guidance only and may differ based on the natural variation of the source material used and/or method of preparation.