Integrity Ingredients Corporation

“Where Quality and Service Meet”

IntegriLIPID’s Uses, Applications & Major Benefits

Extensive line of Vegetable, Nut, Seed & Exotic NATURAL Oils
IntegriLIPID’s Uses, Applications and Major Benefits

IntegriLIPID Almond Oil Sweet
INCI Nomenclature: Prunus amygdalus dulcis (Sweet Almond) Oil

Sweet almond oil is an excellent emollient for softening and conditioning the skin. It is well suited for eczema, psoriasis and itchy, dry and inflamed skin. It is rich in essential fatty acids and vitamins A, B1, B2, B6 and E. Sweet almond oil is light and penetrates easily making it useful as a massage or after bath oil. Commonly used in creams, lotions, lotion bars, balms, scrubs, massage oils and soap. It saponifies easily and yields a mild soap with good lather.

Shelf Life: 1 year.

Typical Fatty Acid Profile:

- 14:0 Myristic 0.10%
- 16:0 Palmitic 6.60%
- 16:1 Palmitoleic 0.50%
- 17:0 Margaric 0.10%
- 18:0 Stearic 1.40%
- 18:1 Oleic 63.60%
- 18:2 Linoleic 25.40%
- 18:3 Linolenic 0.20%
- 20:0 Arachidic 0.10%
- 20:1 Gadoleic 0.10%

IntegriLIPID Apricot Kernel Oil
INCI Nomenclature: Prunus armeniaca (Apricot) Kernel Oil

Apricot kernel oil is a light but rich oil that is high in oleic and linoleic acids. It is similar to sweet almond oil and is readily absorbed into the skin. It is especially good for mature, sensitive skin that is inflamed or dry. Apricot kernel oil may be used in massage oils for babies and adults and in creams, lotions, balms, and soaps.

Shelf Life: 1 year.

Typical Fatty Acid Profile:

- 14:0 Myristic 4.00%
- 16:0 Palmitic 4.92%
- 18:0 Stearic 2.71%
- 18:1 Oleic 64.76%
- 18:2 Linoleic 23.61%
Avocado oil has been used in African skin treatments for centuries. This highly therapeutic oil is rich in vitamins A, B1, B2, B5 (Pantothenic acid), Vitamin D, E, minerals, protein, lecithin and fatty acids. It is a useful, penetrating nutrient for dry skin and eczema. Avocado oil is said to have healing and regenerating qualities. It may be used in massage oils as well as creams, lotions, balms, body butters, hair oils and lip balms. It also has a high percentage of unsaponifiables, making it excellent oil for use in soaps. Although it can be used as a major portion of oils for a sensitive skin bar, it is relatively expensive.

Shelf Life: 1 year.

**Typical Fatty Acid Profile**

<table>
<thead>
<tr>
<th>Fatty Acid</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:0 Myristic</td>
<td>0.06%</td>
</tr>
<tr>
<td>16:0 Palmitic</td>
<td>19.20%</td>
</tr>
<tr>
<td>16:1 Palmitoleic</td>
<td>8.60%</td>
</tr>
<tr>
<td>17:1...</td>
<td>0.10%</td>
</tr>
<tr>
<td>18:0 Stearic</td>
<td>0.40%</td>
</tr>
<tr>
<td>18:1 Oleic</td>
<td>59.50%</td>
</tr>
<tr>
<td>18:2 Linoleic</td>
<td>11.60%</td>
</tr>
<tr>
<td>18:3 Linolenic</td>
<td>0.60%</td>
</tr>
</tbody>
</table>

**Typical Stearine Profile**

<table>
<thead>
<tr>
<th>Stearine</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholesterol</td>
<td>1.80%</td>
</tr>
<tr>
<td>Campesterol</td>
<td>19.10%</td>
</tr>
<tr>
<td>Avenasterol</td>
<td>6.10%</td>
</tr>
<tr>
<td>Avenasterol</td>
<td>0.20%</td>
</tr>
</tbody>
</table>

Blackcurrant seed oil is very rich in essential fatty acids of both the Omega-6 group e.g. linoleic acid, GLA and the Omega-3 group e.g. a-linolenic acid. The rare GLA is only found in a few plant species. In the body GLA is directly derived from linoleic acid and further metabolized to autacoids. These are hormone like substances which play a key role in a wide range of physiological functions in the human body, especially the skin. It is furthermore known that linoleic acid strongly reduces the Trans Epidermal Water Loss (TEWL) and in the presence of GLA is clearly enhanced. a-linolenic acid, also found in significant quantities in this oil is an Omega-3 fatty acid, which acts as a counterbalance to the long chain Omega-6 fatty acids, avoiding excessive formation of Omega-6 metabolites which have inflammatory properties. Gamma-linolenic acid, has been established to be an important component in maintaining the elasticity of the skin.

Blackcurrant oil may be used as the key ingredient when formulating products for dry, devitalized, damaged and aging skin. It is also excellent in products for sensitive skin, eczema or psoriasis. This oil can be used at any proportion in skin care, hair care, baby care and sun care products.

Shelf Life: 6-9 months.

**Typical Fatty Acid Profile:**

<table>
<thead>
<tr>
<th>Fatty Acid</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:0 Palmitic</td>
<td>6.60%</td>
</tr>
<tr>
<td>18:0 Stearic</td>
<td>1.80%</td>
</tr>
<tr>
<td>18:1 Oleic</td>
<td>6.60%</td>
</tr>
<tr>
<td>18:2 Linoleic</td>
<td>50.30%</td>
</tr>
<tr>
<td>18:3 Linolenic</td>
<td>25.70%</td>
</tr>
<tr>
<td>18:4 Stearidonic</td>
<td>2.70%</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>0.80%</td>
</tr>
<tr>
<td>Sitostanol</td>
<td>5.00mg/100g</td>
</tr>
<tr>
<td>Sitosterol</td>
<td>19.90mg/100g</td>
</tr>
<tr>
<td>Brassicasterol</td>
<td>1.40mg/100g</td>
</tr>
</tbody>
</table>

**Typical Stearine Profile:**

<table>
<thead>
<tr>
<th>Stearine</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitostanol</td>
<td>5.00mg/100g</td>
</tr>
<tr>
<td>Campesterol</td>
<td>19.90mg/100g</td>
</tr>
<tr>
<td>Campestanol</td>
<td>14.10mg/100g</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>5.00mg/100g</td>
</tr>
<tr>
<td>Delta 5-Avenasterol</td>
<td>58.70mg/100g</td>
</tr>
<tr>
<td>Delta 5-Stigmaadienol</td>
<td>12.60mg/100g</td>
</tr>
<tr>
<td>Delta 7-Stigmaadienol</td>
<td>5.00mg/100g</td>
</tr>
<tr>
<td>Delta 7-Avenasterol</td>
<td>50.40mg/100g</td>
</tr>
<tr>
<td>Delta 7-Campesterol</td>
<td>1.80mg/100g</td>
</tr>
<tr>
<td>Delta 7-24-Stigmaadienol</td>
<td>28.10mg/100g</td>
</tr>
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</table>

**Typical Tocopherol Profile:**

<table>
<thead>
<tr>
<th>Tocopherol</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha-Tocopherol</td>
<td>121.00mg/kg</td>
</tr>
<tr>
<td>alpha-Tocotrienol</td>
<td>27.00mg/kg</td>
</tr>
<tr>
<td>beta-Tocopherol</td>
<td>6.00mg/kg</td>
</tr>
<tr>
<td>beta-Tocotrienol</td>
<td>5.00mg/kg</td>
</tr>
<tr>
<td>delta-Tocopherol</td>
<td>147.00mg/kg</td>
</tr>
<tr>
<td>gamma-Tocopherol</td>
<td>867.00mg/kg</td>
</tr>
</tbody>
</table>
Integrity Ingredients Corporation

IntegriLIPID Black Seed Oil Organic
INCI Nomenclature: Nigella Sativa (Black Seed) Oil

As well as the amazing benefits for internal use, Black Seed oil can be used for personal care. Areas of application range from treatment of psoriasis, eczema and dry skin to nourishing and moisturizing face creams and shampoos. Used internally or externally, black seed oil can reverse the harsh sun damage on delicate skin, and rejuvenate tired, older skin.

Black seeds chemical composition is very rich and diverse. Aside from its primary ingredient, crystalline nigellone, it contains 15 amino acids (including 8 of the 9 essential amino acids isoleucine, leucine, lysine, methionine, phenylalanine, threonine, tryptophan, and valine.), proteins, carbohydrates, EFA’s, vitamins A, B1, B2, C and niacin as well as the minerals calcium, potassium, iron, magnesium, selenium and zinc. Black Seed typically contains over 58% of omega 6 (polyunsaturated fats) EFA’s and 24% of omega 9 (monounsaturated fats), EFA’s.

Shelf Life: 1 year.

Typical; Fatty Acid Profile:

<table>
<thead>
<tr>
<th>Fatty Acid</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:0 Myristic</td>
<td>0.2%</td>
</tr>
<tr>
<td>16:0 Palmitic</td>
<td>11.80%</td>
</tr>
<tr>
<td>16:1 Palmitoleic</td>
<td>0.2%</td>
</tr>
<tr>
<td>18:0 Stearic</td>
<td>2.90%</td>
</tr>
<tr>
<td>18:1 Oleic</td>
<td>23.9%</td>
</tr>
<tr>
<td>18:2 Linoleic</td>
<td>56.70%</td>
</tr>
<tr>
<td>18:3 Linolenic</td>
<td>0.2%</td>
</tr>
<tr>
<td>20:0 Arachidic</td>
<td>0.20%</td>
</tr>
<tr>
<td>20:1 Eicosenoic</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Typical; Nutritional Value:

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Amount (ug/g)</th>
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</thead>
<tbody>
<tr>
<td>Protein</td>
<td>208</td>
</tr>
<tr>
<td>Thiamin</td>
<td>15</td>
</tr>
<tr>
<td>Riboflavin</td>
<td>1</td>
</tr>
<tr>
<td>Pyridoxine</td>
<td>5</td>
</tr>
<tr>
<td>Niacin</td>
<td>57</td>
</tr>
<tr>
<td>Folacin</td>
<td>610</td>
</tr>
<tr>
<td>Calcium</td>
<td>1.859</td>
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<tr>
<td>Iron</td>
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<tr>
<td>Copper</td>
<td>18</td>
</tr>
<tr>
<td>Zinc</td>
<td>60</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>5.265</td>
</tr>
</tbody>
</table>

IntegriLIPID Borage Oil Refined
INCI Nomenclature: Borago officianalis (Borage) Seed Oil

Borage oil is rich in two very important polyunsaturated fatty acids, as it contains up to 40% linoleic acid and up to 25% of Gamma-linolenic acid which is found in only a few other plant species. In the body GLA is directly derived from linoleic acid and further metabolized to autocoids. These are hormone like substances which play a key role in a wide range of physiological functions in the human body, especially the skin. It is furthermore known that linoleic acid strongly reduces the Trans Epidermal Water Loss (TEWL) and in the presence of GLA is clearly enhanced. α-linolenic acid, also found in significant quantities in this oil is an Omega-3 fatty acid, which acts as a counterbalance to the long chain Omega-6 fatty acids, avoiding excessive formation of Omega-6 metabolites which have inflammatory properties. Gamma-linolenic acid, has been established to be an important component in maintaining the elasticity of the skin. It also contains important vitamins and minerals. It is typically used in high-end cosmetic formulations to nourish and hydrate the skin. A very useful oil for incorporation into facial blends for mature skin or in blends for damaged skin where regeneration of new skin cells is needed. Typical usage level: 10%. It does however have a relatively short shelf life.

Shelf Life: 1 year.

Typical; Fatty Acid Profile:

<table>
<thead>
<tr>
<th>Fatty Acid</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:0 Palmitic</td>
<td>10.90%</td>
</tr>
<tr>
<td>18:0 Stearic</td>
<td>3.60%</td>
</tr>
<tr>
<td>18:1 Oleic</td>
<td>16.60%</td>
</tr>
<tr>
<td>18:2 Linoleic</td>
<td>39.80%</td>
</tr>
<tr>
<td>18:3 Linolenic</td>
<td>21.70%</td>
</tr>
<tr>
<td>20:1 Gadoleic</td>
<td>3.90%</td>
</tr>
<tr>
<td>22:1 Erucic</td>
<td>2.00%</td>
</tr>
<tr>
<td>24:1 Nervonic</td>
<td>1.20%</td>
</tr>
</tbody>
</table>
IntegriLIPID Camelina Sativa Oil “Gold of Pleasure”
INCI Nomenclature: Camelina sativa (Camelina) Seed Oil

Camelina oil, also known as Gold of Pleasure, is obtained from the plant Camelina sativa. It is also known as False Flax. It is a very rich source of polyunsaturated fatty acids (PUFAS). Camelina oil is particularly high in alpha-linolenic acid and as a result has a very beneficial effect on the skin, improving elasticity. It provides a protective coating for hair follicles and is useful in hair care formulations. Its high content of natural tocopherols the oil is particularly resistant to oxidation, having an excellent shelf life.

Shelf Life: 2 years.

Typical Fatty Acid Profile:
- 16:0 Palmitic 6.40%
- 18:0 Stearic 2.80%
- 18:1 Oleic 15.90%
- 18:2 Linoleic 20.90%
- 18:3 Linolenic 30.70%
- 20:1 Gadoleic 13.60%
- 22:1 Erucic 3.00%

Typical Tocopherol Profile:
- alpha-Tocopherol 1.75mg/kg
- alpha-Tocotrienol 0.04mg/kg
- beta-Tocopherol 0.99mg/kg
- beta-Tocotrienol 14.28mg/kg
- delta-Tocopherol 0.34mg/kg

IntegriLIPID Castor Oil
INCI Nomenclature: Ricinus communis (Castor) Seed Oil

Castor oil has been “rediscovered” by the cosmetics industry. It has been described as a raw material with a triglyceride composition so uniform that it outperforms most oil and fat derivatives now used in cosmetics. Its pour point is lower, viscosity higher, it is light in color and highly stable. It is neither a primary irritant nor a sensitizer and its main disadvantage is its odor, which can however be masked by a suitable fragrance. Castor oil is a mild moisturizer and non-comedogenic, with excellent film forming and pigment wetting properties. It is widely used in lipstick, nail polish, rouge, lotions, creams and a wide range of stick products. Because of its ready solubility in alcohol, it can be used in alcohol based brilliantine and in transparent soap bars. It should however be used at low percentages to avoid “Soft” soaps.

Shelf Life: 2+ years.

Typical Fatty Acid Profile:
- 9,10-di:OH 18:0 9,10-dihydroxystearic 0.30%
- 12:OH:18:1 12-hydroxyoleic 85.60%
- 14:0 Myristic 0.10%
- 16:0 Palmitic 1.60%
- 17:0 Margaric 0.20%
- 18:0 Stearic 1.50%
- 18:1 Oleic 4.90%
- 18:2 Linoleic 4.50%
- 20:0 Arachidic 0.40% 20:1 Gadoleic 0.90%

Typical Stearine Profile:
- Sitosterol 56.40%
- Campesterol 10.20%
- Stigmasterol 22.40%
IntegriLIPID Coconut Oil
INCI Nomenclature: Cocos nucifera (Coconut) Oil

Refined, bleached and deodorized coconut oil. This coconut oil is extracted from dried coconuts, also known as copra. The coconuts are cut and dried until the moisture content of the meat is minimized. The dried copra is then grated and expeller pressed to remove the oil. Finally, the oil is refined to produce an oil suitable for consumption. Coconut oil is a very good carrier oil for dry, itchy, sensitive skin. It is non comedogenic and is absorbed readily into the skin. Coconut oil is widely used in the soap making industry because of its resistance to rancidity and contribution to a good quality, hard soap with a superior lather. Coconut oil is light and non-greasy. It can be incorporated into balms and stick formulations. Herbal hair infusions are often infused in coconut oil.

Shelf Life: 2 years.

Typical Fatty Acid Profile:

8:0 Caprylic 9.10%
10:0 Capric 6.00%
12:0 Lauric 46.50%
14:0 Myristic 18.40%
16:0 Palmitic 8.10%
18:0 Stearic 4.00%
18:1 Oleic 6.10%
18:2 Linoleic 1.50%

IntegriLIPID Coconut Oil Fractionated
INCI Nomenclature: Caprylic/ Caprylic Triglyceride

Fractionated coconut oil contains only the medium-chain triglycerides (MCTs) of coconut oil, making it a very stable, liquid oil. It is produced through the hydrolysis of coconut oil which is then fractionated by steam distillation to isolate the MCTs. Fractionated coconut oil has an extended shelf life and is a light, non-greasy and non-staining oil. It is much used in aromatherapy massage oils, toiletries and soaps and all types of cosmetics. Fractionated coconut oil is especially useful in face creams where a light oil is desired. It is a useful substitute for sweet almond oil where stability is important.

Shelf Life: 2+ years

Typical Fatty Acid Profile:

6:0 Capronic 0.6
8:0 Caprinic 57.5
10:0 Caprilic 40.6
12:0 Lauric 0.6
14:0 Myristic 0.4
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IntegriLIPID Cranberry Seed Oil Refined
INCI Nomenclature: Vaccinium macrocarpon (Cranberry) Seed Oil

Cranberry oil is relatively new to the skin care industry but has received a lot recognition for its unique natural balance of omega-3, omega-6 & omega-9 fatty acids, which are not found in any other oil and its high content of natural antioxidants. This exceptional oil aids the absorption and utilization of essential fatty acids in the skin and is said to be a superb moisturizer. The oil is rich in tocopherols (vitamin E), is light and non-greasy on the skin and easily penetrates the skin. Cranberry seed oil can be used in moisturizing lip balms, balms, creams, lotions, face and eye creams etc. This oil may aid in the relief of itchy, scaly, irritated skin conditions such as eczema and psoriasis.

“Cranberries are especially rich in seeds, out of 20 metric tons of berries only 20 liters of cranberry seed oil are won. It is therefore one of the most precious plant oils.”

Shelf Life: 2 years.

Typical Fatty Acid Profile:
16:0 Palmitic 6.00%
16:1 Palmitoleic 1.00%
18:0 Stearic 2.00%
18:1 Oleic 18.00%
18:2 Linoleic 33.00%
18:3 Linolenic 22.00%

Typical Tocopherol Profile:
alpha-Tocopherol 12mg/kg
gamma -Tocopherol 0.4mg/kg

IntegriLIPID Evening Primrose Oil
INCI Nomenclature: Oenothera biennis (Evening Primrose) Oil

Evening primrose oil is rich in two very important polyunsaturated fatty acids, as it contains over 70% linoleic acid and approximately 10% of the rare gamma-linolenic acid. In the body gamma-linolenic acid is directly derived from linoleic acid and metabolized to autocoids, hormone like substances which play key roles in a wide range of physiological functions in the human body, especially in the skin. Evening primrose oil can be distinguished from monounsaturated oils in that it does not act by occlusion only, but is readily absorbed by the skin, where it exerts its effect in two ways e.g. by reduction of the Trans Epidermal Water Loss and by the formation of autocoids. The linoleic acid is a very important building block in the formation of the bi-layer lipid membrane, whereby the other fatty acid, gamma-linolenic acid not only enhances the penetration into the skin, but also the restoration of the water barrier function of the skin. Furthermore, gamma-linolenic is a precursor in the synthesis of autocoids. In particular the skin is very sensitive to an imbalance of the autocoids resulting in an increasing deficiency of linoleic acid.

Shelf Life: 1 year.

Typical Fatty Acid Profile:
14:0 Myristic 0.10%
16:0 Palmitic 6.80%
16:1 Palmitoleic 0.10%
17:0 Margaric 0.10%
18:0 Stearic 2.00%
18:1 Oleic 8.60%
18:2 Linoleic 72.10%
18:3 Linolenic 8.30%
18:4 Stearidonic 0.10%
20:0 Arachidic 0.40%
20:1 Gadoleic 0.20%
24:0 Lignoceric 0.10%

Typical Stearine Profile:
Cholesterol 1.90mg/100g
Sitosterol 1236.70mg/100g
Brassicasterol 3.00mg/100g
Sitostanol 26.30mg/100g
Campesterol 144.80mg/100g
Campestanol 3.30mg/100g
Clersterol 6.10mg/100g
Delta 5:Avenasterol 61.40mg/100g
Delta 7:Stigmastadienol 73.80mg/100g
Delta 7:Avenasterol 0.80mg/100g
Delta 5-23-Stigmastadienol 0.90mg/100g

Typical Tocopherol Profile:
alpha-Tocopherol 142.00mg/kg
delta-Tocopherol 8.00mg/kg
gamma -Tocopherol 386.00mg/kg
gamma - Tocotrienol 7.00mg/kg
IntegriLIPID Grapeseed Oil Refined
*INCI Nomenclature: Vitis vinifera (Grape) Seed Oil*

Grapeseed oil *is absorbed by the skin relatively quickly and has a dry "skin feel"*. It has an extraordinarily high content of linoleic acid (up to 70%), an essential fatty acid (EFA) which is readily taken up by the skin and reduces the Trans Epidermal Water Loss (TEWL) and thereby restores the elasticity of the skin. Unlike other oils which work by occlusion only, grapeseed oil functions curatively by incorporation of the EFA into the stratum corneum, giving a much longer lasting effect than occlusive oils.

Shelf Life: 1 year.

**Typical Fatty Acid Profile:**

16:0 Palmitic 7.00%
16:1 Palmitoleic 0.50%
18:0 Stearic 4.50%
18:1 Oleic 18:00%
18:2 Linoleic 68.00%
18:3 Linolenic 0.50%
20:0 Arachidic 0.50%

IntegriLIPID Hazelnut Oil Refined
*INCI Nomenclature: Corylus americana (Hazel) Seed Oil*

The fatty acid profile of this oil is comparable to High Oleic Sunflower or High Oleic Safflower oil. It is a very stable oil which can be used as an emollient in a wide range of skin care products. Due to its fatty acid composition it has excellent occlusive properties, enabling it to act as a moisturizing agent by preventing excessive loss of moisture through the epidermis.

Shelf Life: 1 year.

**Typical Fatty Acid Profile**

16:0 Palmitic 5.44%
16:1 Palmitoleic 0.10%
18:0 Stearic 2.76%
18:1 Oleic 78.81%
18:2 Linoleic 12.02%
18:3 Linolenic 0.50%
20:0 Arachidic 0.80%
22:0 Behenic 0.20%
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IntegriLIPID Hemp Seed Oil
**INCI Nomenclature:** Cannabis sativa (Hemp) Seed Oil

Hemp oil has the lowest percentage of saturated fatty acids and the highest percentage of the polyunsaturated essential fatty acids (linoleic and linolenic acids) making it a key *nutritive ingredient* in *anti-inflammatory* skin care formulations. Hemp oil has good *penetrating properties*, may aid the healing of skin lesions, dry skin, and reduce the inflammation of skin and joints. Hemp seed oil can be incorporated into soaps, lotions, lip balms and special formulations for dry, damaged or aging skin.

**Shelf Life:** 1 year.

<table>
<thead>
<tr>
<th>Typical Fatty Acid Profile</th>
<th>Typical Steraine Profile</th>
<th>Typical Tocopherol Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:0 Palmitic 6.44%</td>
<td>Sitosterol 67.25%</td>
<td>-alpha Tocopherol 5.84mg/kg</td>
</tr>
<tr>
<td>16:1 Palmitoleic 0.10%</td>
<td>Campesterol 14.84%</td>
<td>-gamma Tocopherol 94.16mg/kg</td>
</tr>
<tr>
<td>18:0 Stearic 2.76%</td>
<td>Stigmastanol 2.58%</td>
<td></td>
</tr>
<tr>
<td>18:1 Oleic 11.81%</td>
<td>?5-Avenasterol 4.54%</td>
<td></td>
</tr>
<tr>
<td>18:2 Linoleic 58.02%</td>
<td>20:0 Arachidic 0.80%</td>
<td></td>
</tr>
<tr>
<td>18:3 Linolenic 19.83%</td>
<td>22:0 Behenic 0.20%</td>
<td></td>
</tr>
<tr>
<td>20:0 Arachidic 0.80%</td>
<td>22:0 Behenic 0.20%</td>
<td></td>
</tr>
<tr>
<td>22:0 Behenic 0.20%</td>
<td>22:0 Behenic 0.20%</td>
<td></td>
</tr>
</tbody>
</table>

IntegriLIPID Jojoba Oil
**INCI Nomenclature:** Simmondsia chinensis (Jojoba) Seed Oil

Technically Jojoba is a liquid wax rather than a fixed oil. However Jojoba possesses the properties of both and is a particularly good ingredient in soaps, creams, lotions, balms and massage oils. It is *highly penetrating* and closely resembles natural sebum. It is used in facial blends to remove excess oils and to balance the skin's natural oils. Jojoba contains "myristic acid", a *natural anti-inflammatory* and therefore may be useful in arthritis and rheumatism. It contains natural anti-oxidants and when blended with other oils helps to extend the shelf life. It is resistant to rancidity and is frequently used as a super-fatting agent in cold process soap manufacture. Jojoba is often used as a base for essential oil blends and perfume oils. It makes an *excellent hair conditioner*.

**Shelf Life:** 2+ years.

**Typical Fatty Acid Profile:**

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>16:0 Palmitic 3.00%</td>
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<tr>
<td>16:1 Palmitoleic 1.00%</td>
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<tr>
<td>18:0 Stearic 1.00%</td>
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<tr>
<td>18:1 Oleic 10.00%</td>
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<tr>
<td>18:2 Linoleic 5.00%</td>
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<tr>
<td>18:3 Linolenic 1.00%</td>
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<tr>
<td>20:0 Arachidic 0.50%</td>
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<td>20:1 Gondoic 73.00%</td>
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<tr>
<td>22:0 Behenic 0.50%</td>
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<tr>
<td>22:1 Erucic 15.00%</td>
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<tr>
<td>24:0 Lignoceric 5.00%</td>
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IntegriLIPID Macadamia Nut Oil

INCI Nomenclature: Macadamia ternifolia (Macadamia) Seed Oil

The major fatty acids of macadamia nut oil are oleic acid (about 85%) and palmitoleic acid (about 20%). Unsaponifiables constitute less than 1% of the oil. Macadamia oil has a very low concentration of tocopherols and is therefore relatively unstable considering its low iodine value. Its major feature is the similarity of its fatty acid composition with that of sebum. It has been found that as the aging process proceeds, the level of palmitoleic acid in the skin gradually drops. The application of macadamia nut oil is believed to replenish the palmitoleic acid in mature skin. It is one of the most penetrating oils known, and therefore often called a “vanishing oil” because of its rapid absorption by the skin. Thus making it a valuable component in massage creams, muscle rubs and other products where lubrication and penetration are essential.

Shelf Life: 1 year.

Typical Fatty Acid Profile:

15:0 1.00%
16:0 Palmitic 7.20%
16:1 Palmitoleic 11.80%
18:0 Stearic 0.40%
18:1 Oleic 75.60%
18:2 Linoleic 1.40%
18:3 Linolenic 1.10%
20:0 Arachidic 0.70%

IntegriLIPID Olive Oil (Extra Virgin & Refined)

INCI Nomenclature: Olea europaea (Olive) Fruit Oil

Yellow to greenish-yellow mobile fixed oil with a characteristic odor and taste. Practically insoluble in alcohol, olive oil is miscible with light petroleum. When cooled it begins to become cloudy at 10°C and becomes a soft mass at about 0°C. A key property of Olive oil is the high content of Oleic acid and is hygroscopic in nature.

Extraction:
Olives are ground to a paste and mixed with water. The mixture is then centrifuged to separate the oil.

Shelf life: 2 years.

Typical Fatty Acid Profile:

16:0 Palmitic 11.02%
16:1 Palmitoleic 0.78%
18:0 Stearic 3.09%
18:1 Oleic 75.4%
18:2 Linoleic 8.58%
18:3 Alpha Linolenic 0.96%
20:0 Arachidic 0.43%
22:6 Behenic 0.04%

Typical Steriabe Profile:

Sitosterol 79.05%
Campeserol 3.47%
Stigmasterol 0.67%
Delta 5 – Avenasterol 16.74%
IntegriLIPID Peach Kernel Oil Refined  
INCI Nomenclature: Prunus persica (Peach) Kernel Oil

Pure peach kernel oil is very similar to apricot kernel oil. It is a light, penetrating oil that is good for mature or sensitive skin. Use peach kernel oil to make light creams and lotions, massage oils and more. Peach kernel oil is a great oil for lip balms because it absorbs easily and does not leave a greasy feeling. It can also be used as a substitute for sweet almond, grapeseed or apricot kernel oils.

Shelf Life: 1 year.

Typical Fatty Acid Profile:

16:0 Palmitic 5.6%
16:1 Palmitoleic 0.2%
18:0 Stearic 2.8%
18:1 Oleic 64.6%
18:2 Linoleic 26.4%
18:3 Alpha Linolenic 0.1%
20:0 Icosanoic 0.4%
20:1 Icosenoic 0.1%
22:0 Docosanoic 0.1%

IntegriLIPID Pistachio Nut Oil Refined  
INCI Nomenclature: Pistacia Vera Nut Oil

Pistachio Nut Oil is ideally suited for moisturizing in the form of an emulsion or as part of an anhydrous solution. Pistachio nut oil also contains an appreciable amount of linoleic acid, an essential fatty acid, and is rich in natural occurring sterols.

Shelf Life: 1 year.

Typical Fatty Acid Profile:

16:0 Palmitic 9.8%
16:1 Palmitoleic 1.3%
18:0 Stearic 1.7%
18:1 Oleic 57.4%
18:2 Linoleic 27.1%
18:3 Alpha Linolenic 0.7%
20:0 Icosanoic 0.1%
20:1 Icosenoic 0.3%
22:0 Docosanoic 0.2%
24:0 Tetracosanoic 0.1%
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IntegriLIPID Pomegranate Seed Oil
INCI Nomenclature: Punica granatum (Pomegranate) Oil

Cold pressed pomegranate oil moisturizes and nourishes the skin while protecting the skin from free radicals. It is rich in polyphenols that can help reduce the signs of environmental aging. Typical usage levels, up to 5% in creams, lotions, lip balms etc.

Shelf Life: 1 year.

Typical Fatty Acid Profile:

- 16:0 Palmitic 3.5%
- 18:0 Stearic 1.8%
- 18:1 Oleic 11.1%
- 18:2 Linoleic 10.0%
- 18:3 Alpha Linolenic 0.7%
- 20:0 Arachidic 0.4%
- 20:1 Gadoleic 0.6%

IntegriLIPID Poppy Seed Oil Refined
INCI Nomenclature: Papaver somniferum (Poppy) Seed Oil

With an oil content of 35-50% and a fatty acid profile containing 73% linoleic acid, 13% oleic acid and 10% palmitic acid. The composition of triglycerides species is characterized by the presence of LLL (39%), OLL (20%), LLP (18%), LOP (9%), and OLO (6%). Can be used in a similar manner to sunflower seed oil.

Shelf Life: 1 year.

Typical Fatty Acid Profile:

- 14:0 Myristic 0.1%
- 16:0 Palmitic 10.7%
- 16:1 Palmitoleic 0.2%
- 17:0 Heptadecenoic 0.1%
- 18:0 Stearic 2.0%
- 18:1 Oleic 17.1%
- 18:2 Linoleic 68.8%
- 18:3 Alpha Linolenic 0.7%
- 20:0 Icosanoic 0.1%
- 20:1 Icosenoic 0.1%
Integrity Ingredients Corporation

IntegriLIPID Pumpkin Seed Oil
INCI Nomenclature: Cucurbita pepo (Pumpkin) Seed Oil

Pumpkin Seed Oil is a refined oil obtained from the seeds of Cucurbita Pepo {Pumpkin} Seed, by cold the expeller press method. This oil is highly suitable for cosmetics and toiletries due to its mild odor. This oil has traditionally been used in Chinese medicine, and more recently in nutraceuticals; It is known to contain Phytosterols and Omega-3, 6 and 9 fatty acids, all of which are beneficial to good cellular health. Pumpkin seed oil may be used in body care, soaps, facial creams, lotions and sunscreens to impart moisturization, particularly for dry, damaged skin (i.e. eczema and psoriasis).

Suggested Use Levels: Lotions & Creams: 4-10%, Balms: 4-10%, Bar Soaps: 2-7%, Hair Conditioners: 3-5%.

Shelf Life: 1 year.

Typical Fatty Acid Profile:

14:0 Myristic 0.2%
16:0 Palmitic 12.7%
16:1 Palmitoleic 0.1%
18:0 Stearic 6.2%
18:1 Oleic 26.5%
18:2 Linoleic 51.8%
18:3 Alpha Linolenic 0.5%
20:0 Icosanoic 0.5%
20:1 Icosenoic 0.1%
22:0 Docosanoic 0.1%
24:0 Tetracosanoic 0.4%
24:1 Tetracosenoic 0.3%

IntegriLIPID Raspberry Oil Refined
INCI Nomenclature: Rubus idaeus (Raspberry) Seed Oil

Raspberry seed oil is excellent for sensitive skin and is deeply nourishing, softening, emollient, lubricating, conditioning, a lipid barrier providing protection to the skin and provides moisture retention for the skin. This oil has UV absorptive properties in all three ranges beneficial for photoprotection. Raspberry seed oil is known especially for its prevention of gingivitis, rash, eczema and other skin lesions. Its use as a cosmetic additive is based in parts on its anti-inflammatory activities which is superior when compared to those other well know oils such as virgin Avocado oil and Grapeseed oil. Raspberry Seed Oil contains large quantities of gamma-tocopherol which has been shown to have superior free radical scavenging properties when compared with alpha-tocopherol, especially for nitrogen oxide radicals.

Shelf Life: 1 year.

Typical Fatty Acid Profile:

16:0 Palmitic 2.3%
16:1 Palmitoleic 0.1%
16:3 Hexadecatetraenoic 0.1%
17:0 Heptadecenoic 0.1%
18:0 Stearic 0.9%
18:1 Oleic 10.9%
18:2 Linoleic 52.6%
18:3 Alpha Linolenic 31.9%
20:0 Icosanoic 0.4%
20:1 Icosenoic 0.1%
22:0 Docosanoic 0.2%
22:1 Docosenoic 0.1%
IntegriLIPID Rice Bran Oil RBDW  
*INCI Nomenclature: Oryza sativa (Rice) Bran Oil*

The fatty acid profile of rice bran oil is characterised by about 40% oleic and 40% linoleic acid, the latter being an extremely important component for *maintaining the moisture and elasticity of the skin*. Rice bran oil is of special importance to the cosmetic industry due to its high content of very valuable unsaponifiables. It is a very rich source of tocopherols, phytosterols and phytic acid.

Rice bran oil typically contains up to 1000ppm tocopherols (vitamin E). Of particular note is the presence of gamma-Oryzanol. Gamma-Oryzanol is a mixture of several phytosterols, mainly campesterol, cycloartenol and methyl cycloartenol, bound with ferulic acid. It exerts various important actions on the skin, e.g. it enhances the peripheral blood flow, it is an *effective UV-filter and reduces the effect of sunburn on the skin*. Furthermore it contains phytic acid, a very effective chelating compound, which enhances the stability of the oil, acting as metal scavenger.

**Shelf Life:** 1 year

**Typical Fatty Acid Profile:**

14:0 Mirystic 0.8%  
16:0 Palmitic 15.0%  
18:0 Stearic 2.0%  
18:1 Oleic 45.0%  
18:2 Linoleic 35.0%  
18:3 Alpha Linolenic 2.0%  
20:0 Arachidic 2.0%

IntegriLIPID Rosehip Oil Refined  
*INCI Nomenclature: Rosa rubiginosa (Rosehip) Oil*

Rosehip oil has outstanding properties, because of its high *concentration of natural tocopherols, linoleic acid and other unsaturated fatty acids that are essential to healthy skin*. Rosehip oil has been used for the *treatment and reduction of scar tissue*, relief of *sensitive skin* and the *promotion of cell regeneration*.

It may be used in cosmetic formulations such as anti-wrinkle creams, shampoos for dry and split hairs, body lotions, creams for dry skin, as well as baby creams and oils.

**Shelf Life:** 1 year.

**Typical Fatty Acid Profile:**

14:0 Mirystic 0.26%  
16:0 Palmitic 3.5%  
16:1 Palmitoleic 0.18%  
18:0 Stearic 1.82%  
18:1 Oleic 15.8%  
18:2 Linoleic 44.6%  
18:3 Alpha Linolenic 33.8%
IntegriLIPID Safflower Oil High Oleic
*INCI Nomenclature: Carthamus tinctorius (Safflower) Oil*

Safflower oil penetrates the skin rapidly and has a dry “skin feel”. It contains an extremely high level of linoleic acid (up to 78%), an essential fatty acid (EFA) which reduces the Trans Epidermal Water Loss (TEWL) and restores the elasticity of the skin. Unlike other oils which are highly occlusive, safflower functions curatively by incorporation into the stratum corneum, giving a much longer lasting effect than occlusive oils.

Shelf Life: 1 year.

Typical Fatty Acid Profile:

**High Oleic**
- 16:0 Palmitic 4.9%
- 16:1 Palmitoleic 0.2%
- 18:0 Stearic 3.9%
- 18:1 Oleic 74.0%
- 18:2 Linoleic 16.4%
- 18:3 Alpha Linolenic 0.2%
- 20:0 Icosanoic 0.1%
- 20:1 Icosenoic 0.1%
- 22:0 Docosanoic 0.1%

IntegriLIPID Sesame Seed Oil Refined
*INCI Nomenclature: Sesamum indicum (Sesame) Seed Oil*

Sesame oil has an optimum balance of mono and polyunsaturated fatty acids, giving it good emollient properties. Its high content of sesamol (a natural antioxidant) not only enhances its stability but also provides an extra sun protection factor.

Shelf Life: 2 years.

Typical Fatty Acid Profile:

- 16:0 Palmitic 9.7%
- 16:1 Palmitoleic 0.1%
- 18:0 Stearic 3.4%
- 18:1 Oleic 39.7%
- 18:2 Linoleic 45.7%
- 18:3 Alpha Linolenic 0.6%
- 20:0 Icosanoic 0.1%
- 20:1 Icosenoic 0.2%
- 22:0 Docosanoic 0.2%
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IntegriLIPID Sunflower Oil RBDW
INCI Nomenclature: Helianthus annuus (Sunflower) Seed Oil

Sunflower seed oil **exhibits excellent penetrating properties and good spreadability**, making it ideal as a massage oil or as a carrier oil for cosmetics. The oil is well tolerated by the skin and is an economical alternative to synthetic or petroleum derived products. **It is used to add moisturising properties to creams**, lotions and soaps. Sunflower seed oil is non-comedogenic.

Shelf Life: 1 year.

**Typical Fatty Acid Profile:**

- 16:0 Palmitic 5.1%
- 16:1 Palmitoleic 0.5%
- 18:0 Stearic 3.8%
- 18:1 Oleic 58.2%
- 18:2 Linoleic 30.3%
- 18:3 Alpha Linolenic 0.7%
- 20:0 Arachidic 0.2%
- 20:1 Gadyoleic 0.1%
- 22:0 Behenic 0.7%
- 24:0 Tetracosanoic 0.4%

IntegriLIPID Sunflower Oil **High Oleic**
INCI Nomenclature: Helianthus annuus (Sunflower) Seed Oil

Sunflower seed oil **exhibits excellent penetrating properties and good spreadability**, making it ideal as a massage oil or as a carrier oil for cosmetics. The oil is well tolerated by the skin and is an economical alternative to synthetic or petroleum derived products. **It is used to add moisturising properties to creams**, lotions and soaps. Sunflower seed oil is non-comedogenic.

Shelf Life: 1 year.

**Typical Fatty Acid Profile:**

- 16:0 Palmitic 6.1%
- 16:1 Palmitoleic 0.5%
- 18:0 Stearic 5%
- 18:1 Oleic 75% Minimum
- 18:2 Linoleic 10%
- 18:3 Alpha Linolenic 0.7%
- 20:0 Arachidic 0.2%
- 20:1 Gadyoleic 0.1%
- 22:0 Behenic 0.7%
- 24:0 Tetracosanoic 0.4%
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IntegriLIPID Walnut Oil Refined

INCI Nomenclature: Juglans regia (Walnut) Oil

Originated from Iran but found in Europe and mainly in France. Oil content: 50-70%. The composition in triacylglycerol species is characterized by the presence of LLL (38%), OLL (18%) and LLLn (18%). It was one of the earliest oils used in painting, and perhaps the commonest medium in the early days of oil painting, but it is little used today. **It dries more slowly than linseed oil but has less tendency to turn yellow.** The oil is now used in human nutrition and dietetic and, as a rich source of linolenic acid (Ln), has been extensively studied in order to evaluate its possible health benefits (cardiovascular diseases).

Shelf Life: 1 year.

**Typical Fatty Acid Profile:**

16:0 Palmitic 7.00%
18:0 Stearic 2.00%
18:1 Oleic 17.00%
18:2 Linoleic 60.00%
18:3 Linolenic 12.00%

IntegriLIPID Wheat Germ Oil Natural

INCI Nomenclature: Triticum vulgare (Wheat) Germ Oil

Wheat germ oil is rich in octacosanol-a potent source of energy much prized by athletes. As a dietary supplement, the oil contains naturally occurring phosphatides and phytosterols which assist in the digestion of fats. Wheat germ oil has become firmly established in the cosmetics industry because of its efficacy in many types of skin care products. **The oil has a high level of tocopherols.** The tocopherol content of crude wheat germ oil exceeds 2000 ppm. Even after refining it contains over 1000ppm. The oil also contains high concentrations of pro-vitamin-A and phytosterols. The essential fatty acid profile is of a balanced mix of over 50% linoleic (Omega-6) and 5% alpha- linolenic acid (Omega-3).

Suggested use levels: 5-10%.

Shelf Life: 2 years.

**Typical Fatty Acid Profile:**

16:0 Palmitic 12.6%
16:1 Palmitoleic 0.1%
18:0 Stearic 2.4%
18:1 Oleic 25.8%
18:2 Linoleic 55.7%
18:3 Alpha Linolenic 2.5%
20:0 Arachidic 0.4%
20:1 Gadoleic 0.2%
22:0 Behenic 0.2%

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