mixture. Optionally, water and/or a viscosity-increasing agent can be added after the addition of the ethoxylated oil.

[0028a] In one aspect, there is provided a transdermal and/or dermal composition comprising:

(a) an ethoxylated oil selected from the group consisting of an ethoxylated macadamia nut oil, an ethoxylated meadow foam oil, an ethoxylated jojoba oil, and an ethoxylated emu oil or mixtures thereof,

(b) an alcohol,

(c) an active ingredient, wherein greater than 90% of the particles of the active ingredient have a particle size that is less than or equal to or any number in between 100, 90, 80, 70, 60, 50, 40, 30, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, or 4 nanometers, or smaller, as determined by Dynamic Light Scattering, using a volume-weighted particle size distribution calculation method; and

(d) optionally, water.

[0028b] In one aspect, there is provided a method of making a transdermal and/or dermal composition comprising the following steps in order:

(a) mixing an amount of an active ingredient with an alcohol; and

(b) adding an ethoxylated oil selected from the group consisting of an ethoxylated macadamia nut oil, an ethoxylated meadow foam oil, an ethoxylated jojoba oil, and an ethoxylated emu oil or mixtures thereof, which is present at a final concentration of 2%-25% by total weight or total volume of the transdermal and/or dermal composition, to the mixture of (a); and

(c) optionally, adding an amount of water to bring the transdermal and/or dermal composition to its final volume, to the mixture of (a) and (b).

[0028c] In one aspect, there is provided the transdermal and/or dermal composition as disclosed herein for use in reducing pain, fever, and/or inflammation in a subject.

[0028d] In one aspect, there is provided the transdermal and/or dermal composition as disclosed herein or the transdermal and/or dermal composition made by the method as disclosed herein for use in transdermal or dermal delivery of the active ingredient.

[0028e] In one aspect, there is provided the transdermal and/or dermal composition as disclosed herein for use in reducing a wrinkle.

[0029] Aspects of the present invention may be elucidated by considering the embodiments listed below.:

1. A transdermal and/or dermal composition (e.g., a liquid) comprising:

(a) an ethoxylated oil,

(b) an alcohol,

(c) an active ingredient, wherein greater than 90% of the particles of the active ingredient have a particle size that is less than or equal to or any number in between 100, 90, 80, 70, 60, 50, 40, 30, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, or 4 nanometers, or smaller, as determined by Dynamic Light Scattering, using a volume-weighted particle size distribution calculation method; and

(d) optionally, water.

1. The transdermal and/or dermal composition of embodiment 1, further comprising one or more viscosity-increasing agents such as, a cellulose derivative that is selected from the group consisting of hydroxyethylcellulose, methylcellulose, hydroxypropyl cellulose, carboxymethyl cellulose, hydroxypropyl methyl cellulose (E464), and hydroxyethyl methyl cellulose.

2. The transdermal and/or dermal composition of embodiment 1 or 2, wherein the active ingredient is an Non-Steroidal Anti-Inflammatory Drug (or NSAID), such as aspirin (acetylsalicylic acid), naproxen (2-(6-methoxynaphthalen-2-yl)propanoic acid), diclofenac (2-(2,6-dichloranilino) phenylacetic acid) (sodium and/or epolamine), ibuprofen (iso-butyl-propanoic-phenolic acid), or ketoprofen ((RS)2-(3-benzoylphenyl)-propionic acid); acetaminophen (N-acetyl-para-aminophenol); a protein such as, collagen, elastin, or insulin, or an antibiotic, such as a doxycycline (4S,4aR,5S,5aR,6R,12aS)-4-(Dimethylamino)-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-1,4,4a,5,5a,6,11,12a-octahydro-2-tetracenecarboxamide) or tetracycline ((4S,6S,12aS)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxonaphthacene-2-carboxamide).

3. The transdermal and/or dermal composition of any one of embodiments 1-3, wherein said ethoxylated oil in the transdermal and/or dermal liquid is present at 2%-25% by total weight or total volume of the transdermal and/or dermal composition.

4. The transdermal and/or dermal composition of any one of embodiments 1-4, wherein said ethoxylated oil is an ethoxylated macadamia nut oil having 10, 11, 12, 13, 14,

WHAT IS CLAIMED IS:

1. A transdermal and/or dermal composition comprising:

(a) an ethoxylated oil selected from the group consisting of an ethoxylated macadamia nut oil, an ethoxylated meadow foam oil, an ethoxylated jojoba oil, and an ethoxylated emu oil or mixtures thereof,

(b) an alcohol,

(c) an active ingredient, wherein greater than 90% of the particles of the active ingredient have a particle size that is less than or equal to or any number in between 100, 90, 80, 70, 60, 50, 40, 30, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, or 4 nanometers, or smaller, as determined by Dynamic Light Scattering, using a volume-weighted particle size distribution calculation method; and

(d) optionally, water.

2. The transdermal and/or dermal composition of claim 1, wherein the active ingredient is an Non-Steroidal Anti-Inflammatory Drug (or NSAID), such as aspirin (acetylsalicylic acid), naproxen (2-(6-methoxynaphthalen-2-yl)propanoic acid), diclofenac (2-(2,6-dichloranilino) phenylacetic acid) (sodium and/or epolamine), ibuprofen (iso-butyl-propanoic-phenolic acid), or ketoprofen ((RS)2-(3-benzoylphenyl)-propionic acid), acetaminophen (N-acetyl-para-aminophenol), salicylic acid, a protein or a polypeptide such as collagen, elastin, or insulin, an antioxidant, an antibiotic, such as a doxycycline (4S,4aR,5S,5aR,6R,12aS)-4-(Dimethylamino)-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-1,4,4a,5,5a,6,11,12a-octahydro-2-tetracenecarboxamide) or tetracycline ((4S,6S,12aS)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxonaphthacene-2-carboxamide), a sugar or sugar-containing compound, hyaluronic acid, a vitamin or a mixture of vitamins, an amino acid or mixtures of amino acids, an anti-viral agent, and an anti-wrinkle agent.

3. The transdermal and/or dermal composition of any one of claims 1 or 2, wherein said ethoxylated oil is an ethoxylated macadamia nut oil having 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 or 24 ethoxylations per molecule.

4. A method of making a transdermal and/or dermal composition comprising the following steps in order:

(a) mixing an amount of an active ingredient with an alcohol; and

(b) adding an ethoxylated oil selected from the group consisting of an ethoxylated macadamia nut oil, an ethoxylated meadow foam oil, an ethoxylated jojoba oil, and an

ethoxylated emu oil or mixtures thereof, which is present at a final concentration of 2%-25% by total weight or total volume of the transdermal and/or dermal composition, to the mixture of (a); and

(c) optionally, adding an amount of water to bring the transdermal and/or dermal composition to its final volume, to the mixture of (a) and (b).

5. The method of claim 4, wherein the active ingredient is selected from the group consisting of an Non-Steroidal Anti-Inflammatory Drug (or NSAID), such as aspirin (acetylsalicylic acid), naproxen (2-(6-methoxynaphthalen-2-yl)propanoic acid), diclofenac (2-(2,6-dichloranilino) phenylacetic acid) (sodium and/or epolamine), ibuprofen (iso-butyl-propanoic-phenolic acid), or ketoprofen ((RS)2-(3-benzoylphenyl)-propionic acid)~~;~~, acetaminophen (N-acetyl-para-aminophenol), salicylic acid, a protein or a polypeptide such as~~;~~ collagen, elastin, or insulin, an antioxidant, an antibiotic, such as a doxycycline (4S,4aR,5S,5aR,6R,12aS)-4-(Dimethylamino)-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-1,4,4a,5,5a,6,11,12a-octahydro-2-tetracenecarboxamide) or tetracycline ((4S,6S,12aS)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxonaphthacene-2-carboxamide), a sugar or sugar-containing compound, hyaluronic acid, an anti-wrinkle agent, and an anti-viral agent.

6. The method of claim 5, wherein the anti-wrinkle agent is selected from the group consisting of collagen, elastin, a peptide, retinol, retinoic acid derivatives, hydroxy acids, alpha hydroxy acid, lactic acid, exfoliants, kinetins, and hyaluronic acid.

7. The method of claim 4, wherein said active ingredient is a hormone, a protein, or a polypeptide selected from the group consisting of insulin, dehydroepiandrosterone (DHEA), and a human growth hormone (hGH).

8. The method of claim 5, wherein said antioxidant is selected from the list comprising alpha-lipoic acid, vitamin C, resveratrol, Epigallocatechin gallate (EGCG), green tea extract, N-acetyl cysteine, glutathione, a tocopherol, a tocotrienol, or mixture thereof.

9. The transdermal and/or dermal composition of claim 2 for use in reducing pain, fever, and/or inflammation in a subject.

10. The transdermal and/or dermal composition of any one of claims 1 or 2 or the transdermal and/or dermal composition made by the method of claim 4 for use in transdermal or dermal delivery of the active ingredient.

11. The transdermal and/or dermal composition of claim 1, wherein the active ingredient is an anti-wrinkle agent selected from the group consisting of collagen, elastin, a

peptide, retinol, retinoic acid derivatives, hydroxy acids, alpha hydroxy acid, lactic acid, exfoliants, kinetins, and hyaluronic acid.

12. The transdermal and/or dermal composition of claim 1 for use in reducing a wrinkle.

13. The method of claim 4, wherein said ethoxylated oil comprises Pegylated (or PEG) material

14. The method of claim 13, wherein said PEG material comprises PEG-16 Macadamia Glycerides.

15. The method of claim 4 wherein said active ingredient comprises one or more opioids, anti-depresssants, anti-epilectic drugs, adjuvant medications, muscle relaxers, nerve abalation drugs, spinal chord stimulators, nutraceuticals, vitamins for improved nutrition, minerals, neuropathy therapy drugs, male hormonal balancing drugs, female hormonal balancing drugs, anti-viral agents, or bio-identical hormones.

16. The method of claim 4, wherein said active ingredient comprises a vitamin or a mixture of vitamins or an amino acid or mixtures of amino acids.

17. The method of claim 4, wherein said active ingredient comprises a sugar or a sugar-containing compound, a cyclodextrin, or a beta-cyclodextrin.