A point of sale system for custom preparation of a personal care product includes a dispensing container, a plurality of personal care product ingredients and mechanisms for introducing determined amounts of selected personal care product ingredients into the dispensing container; and a non-adulterating multi-axis centrifugal mixing apparatus, adapted to mix lotion ingredients within the container, without the mixing apparatus contacting the lotion within the container. An identifying label is be provided for the dispensing container. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location entails introducing selected lotion ingredients into a selected container; centrifugally mixing the ingredients in the container without physically contacting the ingredients; closing the container; and applying a label. The method may be implemented at a point of sale or in response to online orders.
FIGURE 1
FIGURE 4
SYSTEM AND METHOD FOR CUSTOM FORMULATION, NON-ADULTERATING MIXING AND PACKAGING OF PERSONAL CARE PRODUCTS

FIELD OF THE INVENTION

[0001] This invention generally relates to lotions, and more particularly, to a system and method for custom formulation, non-adulterating mixing and packaging of personal care products.

BACKGROUND

[0002] Today, consumers may customize their new automobile, personal computer and paint purchases by selecting from various base models and adding components (e.g., music systems, microprocessors or pigments) to accommodate their needs and desires. However, conventional cosmetics such as personal care products are typically provided to consumers as predetermined formulations on a “take it or leave it” basis. A consumer is relegated to either purchasing a product from inventory or forgoing a purchase. A drawback of this method of doing business is that the cosmetic is not optimized to accommodate a consumer’s needs and preferences. The formulation may have an unpleasant scent, a fragrance that is either too strong or too weak, excessive or insufficient moisturizers, allergens or some other problematic ingredient, concentration or deficiency.

[0003] Another drawback with conventional methods of selling cosmetics is expiration. Many cosmetics contain ingredients that lose their freshness and potency over time. Conventional cosmetics, particularly unpopular items, may be stored in inventory and on shelves for many months before retail sale and consumption. By the time a consumer uses a cosmetic, it may have lost its effectiveness. Unfavorable consumer experiences with stale cosmetics may lead to complaints, refunds, recalls, discarded inventory and loss of goodwill.

[0004] Yet another drawback with conventional methods of selling cosmetics is inventory. Retailers inventory and store limited quantities of limited pre-determined cosmetic formulations. If a retailer misjudges consumer preferences, the retailer may be stuck with a large quantity of unpopular inventory.

[0005] While custom formulation systems and methods have been devised to accommodate consumers at retail point of sale locations, known conventional systems and methods are not well suited for customized lotion formulation. Lotions are difficult to thoroughly mix while maintaining an uncontaminated environment. Illustratively, customized liquid perfume compositions are easily mixed by shaking their container. However, lotion compositions are not adequately mixed by shaking their container. If conventional blending or mixing equipment is used, the components must be cleaned between uses to prevent bacterial growth and introduction of unwanted residue and impurities in subsequent formulations. In addition, it will be appreciated that lotions tend to be thick and/or viscous, and thus can be very difficult to pour from a mixing container into a consumer package.

[0006] Accordingly, a need exists for a system and method for custom formulation, non-adulterating mixing and packaging of personal care products. The invention is directed to overcoming one or more of the problems and solving one or more of the needs as set forth above.

SUMMARY OF THE INVENTION

[0007] In one aspect of the invention, a point of sale system for custom preparation of a personal care product is provided. The system includes a dispensing container including a container and dispenser, a plurality of personal care product ingredients and means for introducing determined amounts of selected personal care product ingredients into the dispensing container; and a non-adulterating multi-axis centrifugal mixing apparatus, adapted to mix lotion ingredients within the container, without the mixing apparatus contacting the lotion within the container. A label may also be provided for the dispensing container. The label is adapted for identifying selected personal care product ingredients and amounts thereof comprising the personal care product.

[0008] In another aspect of the invention, a method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location is provided. The method includes steps of introducing lotion ingredients for the personal care product selected by a customer at the point of sale into a container selected by a customer at the point of sale; centrifugally mixing lotion ingredients at the point of sale after the lotion ingredients have been introduced into the container and without physically contacting the lotion ingredients in the container; closing the container; and applying a label. The lotion ingredients include an oil-in-water or water-in-oil emulsion. Other ingredients may include additives from the group consisting of bronzing agents, tingling agents, tanning accelerator agents, shimmering agents, cooling agents, anti-aging agents, firming agents, and fragrance agents. The container selected by the customer at the point of sale includes a selected volume and selected dispensing apparatus. The step of introducing lotion ingredients includes introducing selected amounts of each of the selected lotion ingredients from a supply vessel into the container by pumping, extruding or squirting metered or determined amounts. The step of closing the container includes attaching a closure assembly adapted to controllably allow access to and dispensing of the personal care product from the container. The closure assembly may be a cap assembly with an aperture and flip top lid or a pump mechanism. The step of applying a label includes adhering a sticker to the container or printing information on the container. Information describing the personal care product may be entered on the label.

[0009] In yet another aspect of the invention, a method for custom formulation, non-adulterating mixing and packaging of a personal care product to fulfill online orders is provided. The method includes steps of receiving an online order including a selected container and selected lotion ingredients; introducing the selected lotion ingredients for the personal care product into the selected container; centrifugally mixing lotion ingredients after the lotion ingredients have been introduced into the container and without physically contacting the lotion ingredients in the container; closing the container; applying a label; and shipping the closed container containing mixed lotion ingredients to a customer. In a private labeling implementation, the step of applying a label may include receiving label data (e.g., a graphic image file for the label) from the customer, applying the label data to the label and applying the label, with the
label data, to the container. The online method may also include steps of choosing means of payment, choosing a delivery method, and confirming the online order.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] The foregoing and other aspects, objects, features and advantages of the invention will become better understood with reference to the following description, appended claims, and accompanying drawings, where:

[0011] FIG. 1 is a perspective view of an exemplary mixing apparatus for use in a method for custom formulation, non-adulterating mixing and packaging of personal care products in accordance with principles of the invention; and

[0012] FIG. 2 is a flowchart of steps of an exemplary method for custom formulation, non-adulterating mixing and packaging of personal care products in accordance with principles of the invention; and

[0013] FIG. 3 is perspective view of an exemplary container for use in a method for custom formulation, non-adulterating mixing and packaging of personal care products in accordance with principles of the invention; and

[0014] FIG. 4 is plan view of an exemplary label for a container for use in a method for custom formulation, non-adulterating mixing and packaging of personal care products in accordance with principles of the invention.

[0015] Those skilled in the art will appreciate that the invention is not limited to the exemplary embodiments depicted in the figures or the shapes, relative sizes, proportions or materials shown in the figures.

DETAILED DESCRIPTION

[0016] As used herein, “dermatologically-acceptable,” means that the compositions or components thereof so described are suitable for use in contact with human skin without undue toxicity, incompatibility, instability, allergic response, and the like. “Personal care products” include antiperspirants/deodorants, body washes, lotions, moisturizers, hair care products, oral hygiene products, facial care products and other products formulated for personal hygiene and beautification.

[0017] With reference to FIG. 1, an exemplary mixing apparatus 100 according to principles of the invention comprises a non-adulterating multi-axis centrifugal mixing apparatus. The non-adulterating multi-axis centrifugal mixing apparatus includes a rotating assembly comprised of a stationary base 105 and a rotor 110 rotatably mounted thereon. The rotor 110 is rotatable about a primary axis 110a. At least one mount 115, 120 for receiving a container, which holds the lotion, is provided on the rotor 110. The mounts 115, 120 are supported on the rotor 110 for rotation about secondary axes 115a, 120a eccentric with respect to the primary axis and preferably not parallel to the primary axis 110a. In a preferred implementation, the mounts are attached at an angle, which may be fixed or adjustable, such that the secondary axes 115a, 120a are not parallel to primary axes. A motor drives a transmission which causes the mounts 115, 120 to rotate about the secondary axes 115a, 120a while the rotor 110 rotates about the primary axis 110a. The motor 110 may rotate clockwise or counterclockwise about the primary axis 110a. Likewise, the mounts 115, 120 may rotate clockwise or counterclockwise about the secondary axes 115a, 120a. An electric motor drives a transmission which causes the rotor 110 to rotate about the primary axis 110a, and the mounts 115, 120 to rotate about the secondary axes 115a, 120a. While a plurality of mounts 115, 120 are preferred for counterbalancing during rotation, a single mount may be utilized and counterbalanced with a counterweight. The counterweight may be secured in the second mount, or attached to the rotor 110 opposite the first mount. More than two mounts 115, 120 each for receiving a mixing container may be disposed on the rotor 110 at positions equiangularly spaced around the primary axis 110a.

[0018] In use, the rotor 110 rotates about the primary axis 110a, and the mounts 115, 120 rotate about the secondary axes 115a, 120a. The resulting centrifugal forces cause the lotion components in a container to perform a rolling or tumbling movement along the inner wall of the mixing chamber. Taking into consideration that the longitudinal axes of the mounts 115a, 120a are not parallel to the primary axis 110a, as the contents tumble they roll towards the top and then towards the bottom of the container (or vice versa). The components will thereby be mixed thoroughly to form a homogeneous lotion within the container. The exemplary mixing apparatus 100 renders separate mixing vessels and conventional mixing paddles unnecessary. Advantageously, as nothing contacts the lotion except the container during the mixing process, the exemplary mixing apparatus 100 blends the components without adulterating the lotion and without requiring cleanup of any mixing tools.

[0019] The rotational rates and duration of a mixing cycle may be varied to achieve adequate mixing of the lotions. In an exemplary implementation, the radius of rotation of the rotor is approximately 5 to 15 inches, and the radius of rotation of each mount is approximately 2 to 5 inches. The rotational velocity of the rotor and each mount is approximately 200 to 2000 rpm. Depending upon the viscosity of the ingredients, environmental conditions, and the volume of contents and configuration of the container, the rotational rates and mixing duration may be adjusted to achieve a thoroughly mixed homogeneous lotion. Typically, 15 to 30 seconds will suffice.

[0020] Referring now to FIG. 3, an exemplary dispensing container 300 is conceptually shown. The dispensing container 300 includes an outer container 310 or bottle having a threaded neck portion 305. A label 315 as discussed more fully below is attached to the container 300. Preferably, the bottle is configured to fit in the mounts 115, 120a of the mixing apparatus 100. A closure assembly is provided to engage the threaded neck 305 and controllably allow access to and dispensing of the contents. Illustratively, the closure assembly may comprise a cap assembly 320 including a threaded cap 325, with an aperture and flip top lid 335. Alternatively, the closure assembly may comprise a pump mechanism 340 with a pump cylinder and piston or plunger, reciprocably moveable therein. A dip tube 345 is carried by the cylinder and communicates with the interior of the container, in the usual manner. The pump mechanism 340 has a discharge orifice 355 and a depress plunger 360 with a finger-engagable top surface. In use, depressing the plunger 360 forces lotion through the dip tube 345 and out of the orifice 355.

[0021] Referring now to FIG. 4, a plan view of an exemplary label 315 for a container for use in a method for custom formulation, non-adulterating mixing and packaging of personal care products in accordance with principles of the invention is shown. The label may be a sticker affixed to the
Tanning lotions are generally oil-in-water or water-in-oil emulsions blended with key ingredients to assist the tanning process. Some ingredients are designed to produce effects such as tingling, bronzing, cooling or a combination of the foregoing. Bronzing can be achieved using dihydroxyacetone (DHA). Juglone and lawson, which are naphthoquinones, may be used in combination with DHA to modify the color or hue of the tan or to intensify the color. FD&C dyes that yield a golden brown color may also be used. Tingling can be achieved using Benzyl or Methyl Nicotinate, which promote circulation on the skin’s surface. The improved circulation provides a redness along with a hot tingling sensation normally associated with natural outdoor tanning. Hemp seed oil and CoQ10 (coenzyme Q10, ubiquinone 50, 2,3-dimethoxy-5-methyl-6-pentacontane- nyl-benzoquinone) anti-oxidants may be provided to soothe the skin by providing a cooling sensation. Shimmer agents such as glitter, gold specks or other similar ingredients provide a sheen to skin that attracts attention. An exemplary tanning lotion of the present invention may be colorless or it may be pigmented with a desired color. Coloring agents (e.g., dyes or pigments) and fragrances may be added to suit a particular consumer’s preferences. Upon exposure to sunlight or other source of ultraviolet radiation, photochromic compounds in the lotion may undergo a photochemical change from clear or colorless to colored, thereby enhancing the appearance of a tan. Concomitantly, UVA and UVB inhibitors may be included to protect against both UVB (ultraviolet radiation with wavelength between 290 and 320 nanometers), which can cause sunburn, and UVA (between 320 and 400 nanometers), which damages the skin with more long-term effects, such as premature skin aging. Other components may include vitamin A derivatives (e.g., retinol), which are used anti aging agents that increase the rate of skin turnover, and temporarily increase collagen, giving a more youthful appearance.

A system and method according to principles of the invention may also be used to produce other personal care products such as shampoo, conditioner, bubble bath and shower gel. Illustratively, shampoo formulations may include deionized water, surfactants, vitamins, amino acids, fungicides (i.e., anti-dandruff agents), anti static agents, dyes, organic solvents or diluents, pearlescent aids, foam boosters, cosurfactants, pediculocides, pH adjusting agents, natural extracts such as walnut extract, perfumes, preservatives, proteins, skin active agents, suspending agents, styling polymers, sunscreens, thickeners, pigments, fragrances, and viscosity adjusting agents. This list of components is illustrative and not meant to be exclusive. Other components can be used. The invention is not limited to any specific formulation.

Conditioners may comprise moisturizers, typically containing humectants; reconstructors, usually containing hydrolyzed protein; acidifiers to maintain the conditioner’s pH at about 2.5-3.5, detanglers, which modify the hair surface by pH as acidifiers, and/or by coating it with polymers, as glossers; thermal protectors, usually heat-absorbing polymers; glossers, light-reflecting chemicals binding to the hair surface; silicones, e.g., dimethicone or cycloheximicone; oils such as essential fatty acids; surfactants; lubricants, such as fatty alcohols, panthenol, dimethicone; sequestrants, for better function in hard water; anti static agents; and preservatives; adjusting agents, perfumes, preservatives, proteins, skin active agents, suspending
agents, styling polymers, sunscreens, thickeners, pigments, fragrances, and viscosity adjusting agents. This list of components is illustrative and not meant to be exclusive. Other components can be used. The invention is not limited to any specific formulation.

[0028] Bubble baths may also be produced by adding foaming surfactants like sodium dodecyl sulfate to water. Other ingredients may include perfumes, natural extracts such as honey and oatmeal concentrates, preservatives, proteins, skin active agents, suspending agents, sunscreens, thickeners, pigments, fragrances, and viscosity adjusting agents. This list of components is illustrative and not meant to be exclusive. Other components can be used. The invention is not limited to any specific formulation.

[0029] Shower gels, i.e., liquid soaps, may also be produced by adding foaming surfactants like sodium dodecyl sulfate to water. Other ingredients may include perfumes, natural extracts such as honey and oatmeal concentrates, preservatives, proteins, skin active agents, suspending agents, sunscreens, thickeners, pigments, fragrances, and viscosity adjusting agents. This list of components is illustrative and not meant to be exclusive. Other components can be used. The invention is not limited to any specific formulation.

[0030] Referring now to FIG. 2, a flowchart of steps of an exemplary method for custom formulation, non-adulterating mixing and packaging of personal care products in accordance with principles of the invention is shown. The exemplary process starts 200 at a point of sale location where a customer selects lotion ingredients to include in a lotion recipe, as in step 210. A merchant may recommend a recipe, provide samples, suggest concentrations of ingredients, provide graphical aids (e.g., before and after photos) to help a customer make selections. The merchant may inquire about a customer’s preferences, skin conditions, allergies, medical ailments and the like to make suitable recommendations.

[0031] A customer may also select a container, as in step 220. Many container options may be available. For instance, the size (i.e., volume) of the container may be a variable. The type of dispensing mechanism may also be a variable.

[0032] After a container and recipe have been selected, the ingredients are introduced into the container, as in step 230. Ingredients may be introduced in any effective manner. By way of example and not limitation, high viscosity ingredients may be pumped, extruded or squirted from a supply vessel into the container. Illustratively, without limitation, low viscosity ingredients may be poured, pumped or squirted into the container. As another example, solids may be introduced as powder, tablets or crystals, in a solution or any other form effective for introducing solid ingredients into a composition. Any other method of introducing an ingredient into a container may be utilized and comes within the scope of the invention.

[0033] To achieve desired concentrations, determined quantities of pumped, extruded and/or squirted contents may be introduced. Weighing and metering equipment, pre-measured quantities and/or calibrated dispensing devices may be utilized.

[0034] Before the ingredients are mixed, the container is closed, as in step 240. A closure assembly may be provided to threadedly engage a threaded neck on the container and controllably allow access to and dispensing of the lotion in the container. Illustratively, the closure assembly may comprise a cap assembly with an aperture and flip top lid, as described above with reference to FIG. 3. Alternatively, the closure assembly may comprise a pump mechanism with a pump cylinder and piston or plunger, reciprocally movable therein, as described above with reference to FIG. 3. Any other closure assembly suitable for enclosing and enabling access to contents may be utilized.

[0035] After the ingredients have been introduced into the container and the container has been closed, the lotion is mixed, as in step 250. The mixing device must thoroughly blend the ingredients to achieve a homogenous lotion, without adulterating the lotion. By way of example, a multi-axis centrifugal mixing device, as described above with reference to FIG. 1, may be utilized to mix the lotion directly in the container. Centrifugal forces generated by the mixer cause the ingredients in the container to perform a rolling or tumbling movement along the inner wall of the container and roll towards the top and then towards the bottom of the container (or vice versa). The components are thereby mixed thoroughly to form a homogenous lotion within the container, without adulterating the lotion and without requiring cleanup of any mixing tools.

[0036] A label is applied to the container, as in step 260. The label serves several purposes, including identification of the lotion and its components. The label may be a sticker that is adhered to the container. Alternatively, the label may be printed on the container. Containers may be supplied with labels pre-applied thereon, in which case the step of applying a label may simply entail entering missing information on the pre-applied label.

[0037] After a label has been applied, the lotion ingredients have been introduced into the container and fully mixed, and the container has been closed, the product may be provided to a customer, thus completing the process, as in step 270. In this manner, a customer is able to purchase a custom-formulated lotion at a point of sale.

[0038] In another embodiment, an online shop, internet shop, webshop or online store may be utilized to interface with customers. Online shopping offers speed, ease of use and convenience. When the process described above with reference to FIG. 2 is conducted online, a customer selects lotion ingredients to include in a lotion recipe, as in step 210. The online shop may recommend one or more recipes, offer samples to be delivered, suggest concentrations of ingredients, provide graphical aids (e.g., before and after photos) to help a customer make selections, and provide lists of ingredients and dermatologically acceptable ranges.

[0039] In the online shop implementation, a customer may also select a container, as in step 220. Many container options may be available. For instance, the size (i.e., volume) of the container may be a variable. The type of dispensing mechanism may also be a variable. The various available containers and dispensers may be presented textually and/or graphically at the online shop.

[0040] After a container and recipe have been selected, the ingredients are introduced into the container by the online merchant, as in step 230. After the ingredients are introduced into the container, the lotion is mixed by the online merchant, as in step 240. The mixing device preferably blends the ingredients in the container to achieve a homogenous lotion, without adulterating the lotion. After the ingredients are thoroughly mixed, the container is closed, as in step 250. A label is also applied to the container, as in step 260. After the label has been applied, the lotion ingredients have been introduced into the container and fully mixed, and the
container has been closed, the product is ready for shipping to a customer, thus completing the process, as in step 270. Additional steps and aspects that are typical of online purchasing in general may include putting items into a virtual shopping cart, viewing the contents of the cart, allowing an opportunity to change quantities of products or delete products, checking-out, logging in or registering by choosing a username and a password, entering personal data, choosing means of payment, choose a delivery speed and method (post, courier and logistics service, etc.) of delivery, and confirming an order. In this manner, a customer is able to purchase a custom-formulated lotion online. Such online purchases may be made at the retail level to consumers or at the wholesale level to retailers. In the latter case, a private label selected or provided by the retailer may be applied to the containers, to enable retail sales by the retailer under the retailer’s own brand.

While an exemplary embodiment of the invention has been described, it should be apparent that modifications and variations thereto are possible, all of which fall within the true spirit and scope of the invention. With respect to the above description then, it is to be realized that the optimum relationships for the components and steps of the invention, including variations in order, form, content, function and manner of operation, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention. The above description and drawings are illustrative of modifications that can be made without departing from the present invention, the scope of which is to be limited only by the following claims. Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents are intended to fall within the scope of the invention as claimed.

What is claimed is:

1. A point of sale system for custom preparation of a personal care product, said system comprising:
   a dispensing container including a container and dispenser; and
   a plurality of personal care product ingredients and means for introducing determined amounts of selected personal care product ingredients into said dispensing container, and
   a non-adulterating multi-axis centrifugal mixing apparatus, adapted to mix lotion ingredients within said container, without the mixing apparatus contacting the lotion within the container.

2. A point of sale system for custom preparation of personal care products according to claim 1, said system further comprising a label for said dispensing container, said label being adapted for identifying selected personal care product ingredients and amounts thereof comprising the personal care product.

3. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location, said method comprising steps of introducing lotion ingredients for the personal care product selected by a customer at the point of sale into a container selected by a customer at the point of sale; centrifugally mixing lotion ingredients at the point of sale after the lotion ingredients have been introduced into the container and without physically contacting the lotion ingredients in the container; closing the container; and applying a label.

4. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 3, wherein said lotion ingredients include an emulsion from the group consisting of oil-in-water and water-in-oil emulsions.

5. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 4, wherein said ingredients include additives from the group consisting of bronzing agents, tingling agents, shimmering agents, and cooling agents.

6. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 4, wherein said ingredients include additives from the group consisting of bronzing agents, tingling agents, tanning accelerator agents, shimmering agents, cooling agents, anti-aging agents, firming agents, and fragrance agents.

7. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 3, wherein said container selected by a customer at the point of sale includes a selected volume and selected dispensing apparatus.

8. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 3, wherein step of introducing lotion ingredients selected by a customer at the point of sale into a container selected by a customer at the point of sale includes introducing selected amounts of each of the selected lotion ingredients from a supply vessel into the container.

9. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 3, wherein step of introducing lotion ingredients selected by a customer at the point of sale into a container selected by a customer at the point of sale includes introducing metered amounts of each of the selected lotion ingredients from a supply vessel into the container by an action from the group consisting of pumping, extruding and squirting.

10. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 3, wherein step of introducing lotion ingredients selected by a customer at the point of sale into a container selected by a customer at the point of sale includes introducing metered amounts of each of the selected lotion ingredients from a supply vessel into the container by an action from the group consisting of pumping, extruding and squirting.
12. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 3, wherein said step of closing the container includes attaching a closure assembly adapted to controllably allow access to and dispensing of the personal care product from the container.

13. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 3, wherein said step of closing the container includes attaching a closure assembly adapted to controllably allow access to and dispensing of the personal care product from the container, said closure assembly comprising a cap assembly with an aperture and flip top lid.

14. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 3, wherein said step of closing the container includes attaching a closure assembly adapted to controllably allow access to and dispensing of the personal care product from the container, said closure assembly comprising a pump mechanism.

15. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 3, wherein said step of applying a label includes adhering a sticker to the container.

16. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 3, wherein said step of applying a label includes printing information on the container.

17. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 3, wherein said step of applying a label further includes entering information describing the personal care product on the label.

18. A method for custom formulation, non-adulterating mixing and packaging of a personal care product to fulfill online orders, said method comprising steps of receiving an online order including a selected container and selected lotion ingredients; introducing the selected lotion ingredients for the personal care product into the selected container; centrifugally mixing lotion ingredients after the lotion ingredients have been introduced into the container and without physically contacting the lotion ingredients in the container; closing the container; applying a label; and shipping the closed container containing mixed lotion ingredients to a customer.

19. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 18, wherein the step of applying a label includes receiving label data from the customer, applying the label data to the label and applying the label, with the label data, to the container.

20. A method for custom formulation, non-adulterating mixing and packaging of a personal care product at a point of sale location according to claim 18, said method further comprising steps of choosing means of payment, choosing a delivery method, and confirming the online order.