CONTAINER WITH A DEVICE TO PREVENT CLOGGING OF A DISPENSING DEVICE OF THE CONTAINER

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ABSTRACT
For a container (1) with a reservoir (2) to collect a product (3) and a dispensing device (4), which is equipped with an opening (5) to dispense a flowable agent, particularly a powdery or granular product (3) dissolved and/or dispersed in a liquid (8), wherein said dispensing device is connected to the reservoir (2), a device (7) with passages (10) is used to hold back excessively large particles of the product (3), so that wholly undissolved product (3) and/or excessively large particles and/or poorly dispersed particles cannot reach the opening (5) of the dispensing device (4) and thereby cannot block the opening (5).

To achieve secure protection of the opening against a blockage, it is proposed that the diameter (1) or the minimum width (12) of the passages (10) is from 0.5 mm to 5 mm and is less than or equal to the diameter (13) or the minimum width of the opening (5) (FIG. 7).
CONTAINER WITH A DEVICE TO PREVENT CLOGGING OF A DISPENSING DEVICE OF THE CONTAINER

FIELD OF THE INVENTION

[0001] The object of the invention relates to a container to collect, mix, dissolve and or disperse a product as well as a dispensing of its flowable content with a device to prevent clogging of an opening of a dispensing device on the container.

BACKGROUND OF THE INVENTION

[0002] It is known that when a powder is dissolved or dispersed into a liquid clumps can form. Undissolved powder particles and/or clumps of poorly dispersed powder particles within the liquid can clog a dispensing device, if the opening is relatively narrow. As controlled dispensing from an opening is desired for some applications, openings with a small cross-section are used to prevent uncontrollable dispensing.

[0003] The problem of clump formation during a mixing process can occur not just when dissolving and/or dispersing a powdery material into a liquid. It can also occur when dissolving and/or dispersing granular material into a liquid, when mixing two liquids together, or when mixing a pasty mass into a liquid. Inhomogeneities can occur with an inhomogeneous flowable mass that is mixed with another flowable mass; these inhomogeneities can also clog up a narrow opening, just like undissolved or poorly dispersed solid particles, due to their high viscosity.

[0004] The problem of clump formation is especially prevalent for hair compositions which are created by mixing a liquid together with a powder and/or granular and/or pasty material, for example hair bleaching compositions. Such compositions typically comprise a bleach activator in the form of a powder, granules or a pasty substance which is mixed together with a hydrogen peroxide containing formulation. The bleach activator will contain at least one persulfate salt, together with at least one solid buffering agent, examples of which include but are not limited to sodium silicate or sodium metasilicate. These primary particles typically have sizes in the order of a hundred microns. Immediately after mixing, only a small proportion of the bleach activator will have dissolved, whilst the majority will be dispersed within the hydrogen peroxide formulation. The undissolved persulfate and solid buffering agents can readily agglomerate together to form into clumps which can block the opening. The combination of large particles, which are not readily dissolved, and the need for controlled dispensing via use of an opening with a small cross section to prevent uncontrollable dispensing, makes clogging of the opening a significant possibility for such hair compositions. In addition, there is a second problem that can arise for hair bleaching compositions. The pH of the mixed product which contains hydrogen peroxide is typically at least 8, more preferably at least 9 and even more preferably between 10 and 11. Whilst not wishing to be bound by theory, it’s believed that this elevated pH accelerates the decomposition of hydrogen peroxide. A consequence of such an accelerated hydrogen peroxide decomposition is that the mixed highlighting composition can evolve a significant amount of gas over a relatively short period of time. The combination of clumps which can clog up the narrow opening, combined with a rapid evolution of gas by the product can lead to an increase in pressure within the container. The clog will be removed when the pressure within the container exceeds a critical value, causing the clump to be ejected from the narrow opening. This makes the container hazardous to handle such hair compositions.

[0005] Publications DE 76 39 177 and DE 299 17 054 U1 disclose a sieve-like and spring-ball-type device to hold back particles in a bottle equipped with a pacifier for infant formula. Infant formula is created by dissolving a fine small particle size dissolvable milk powder in warm water. WO 98/16458 discloses a fine mesh to retain undissolved detergent compositions pre-mixed with water prior to application onto fabrics.

[0006] These publications disclose containers for collecting a product with a dispensing device connected to the reservoir, wherein said dispensing device has an opening to dispense a flowable agent, particularly a powdery or granular product to be dissolved into a liquid, with a connection between the dispensing device and the container as well as a device to hold back excessively large particles or the undissolved product so that the opening of the dispensing device cannot clog up, wherein the device is fixed into position using a mount between the reservoir and the dispensing device, and wherein the device has a multiplicity of passages, which enable the passage of enough small particles and/or at least some of the dissolved product up to the opening.

[0007] The known containers have the disadvantage that they have passages the diameter of which is either significantly greater or alternatively significantly smaller than the opening to be protected.

[0008] These approaches do not securely protect the opening from clogging when used with a hair composition created by mixing together a liquid with a powder/granular/pasty material, such as a hair bleaching composition. The dispersed agglomerates of particles will either pass through the large passages of the device and clog the opening, or the dispersed particles will clog the narrow passages preventing the dispensing of product from the opening, or retain the particles on the device, thereby altering the nature of the mixed composition dispensed from that which is desired.

[0009] Thus, the object of the present invention is to protect the opening on containers of the type described from clogging, in a secure manner, whilst enabling it to continue to dispense the composition.

SUMMARY OF THE INVENTION

[0010] The object is achieved according to the characterizing portion of Claim 1. Accordingly, the diameter or the minimum width of the passages is less than or equal to the diameter or the minimum width of the opening.

DETAILED DESCRIPTION OF THE INVENTION

[0011] The container provided has the advantage that it offers secure protection for the opening against clogging when used with hair compositions which are created by mixing a liquid together with a powder/granular/pasty material, such as hair bleaching compositions, while still enabling it to have controlled dispensing. Particles and clumps that would be capable of blocking the opening because of their size are held back from reaching the opening by the device, yet well mixed particles that are dispersed within the liquid can pass through and be dispensed. If a particle or clump has a diameter that is greater than the minimum width of a passage, it is held back at that location. Because the device has a multiplec-
ity of passages, it is extremely unlikely that all of these passages could be blocked. The passages are large enough to enable well dispersed particles to pass through and be dispensed through the opening. This makes the container suitable to handle chemical solutions, such as those found in hair bleaching compositions. A passage has a diameter or minimum width of between about 0.5 mm and 5.0 mm, preferably between about 1.0 mm and 4.0 mm, more preferably between about 1.2 mm and 3.5 mm, and even more preferably between about 2.0 and 3.0 mm. In a preferred embodiment, the device comprises a multiplicity of passages; typically from about 3 to 150, more preferably from about 5 to 100, even more preferably from about 10 to 75 and most preferably from about 10 to 40. Preferably, said device comprises at least 80%, preferably at least 90%, more preferably at least 95% and most preferably at least 99% of said multiplicity of passages having a diameter or minimum width of from about 0.5 mm to 5.0 mm, preferably about 1.0 mm to 4.0 mm, more preferably about 1.2 mm to 3.5 mm. In a particularly preferred embodiment said device comprises from 10 to 40 passages wherein 99% have a diameter or minimum width of from about 1.2 mm to 3.5 mm. The passages may be of an identical or non-identical shape and size. Preferably, the passages have a substantially regular shape and more preferably are substantially circular and/or oblong/slot shaped. In a particularly, preferred embodiment the device comprises two types of passages circular and slot shaped. The passages may also be distributed in a random manner or in a pattern. Preferably, the slot shaped passages, if present, are distributed around the perimeter edge of the device. In another embodiment the slot shaped passages are distributed around the perimeter edge of the device and the circular passages are distributed within the centre area of the device formed by the slot shaped passages. The device may also comprise a part which is passage free, this part is preferably located in substantially the centre of the device. The device itself may also have any shape, but is preferably substantially flat or has an upright or inverted arch shape. The depth of the device is preferably constant and is preferably from about 0.1 mm to 10 mm, more preferably from about 0.5 mm to 5.0 mm, most preferably from about 0.5 to 2 mm. Advantageous embodiments of the proposed container are described in Claims 2 through 10.

[0012] A spout (Claim 2), which can be attached or screwed onto the container, is suitable as the dispensing device; this spout can be used to apply a cosmetic agent for hair to a precise location. In particular, a colorant can be applied to the hairline. Alternatively, a hair composition can be precisely loaded into an applicator, which is then subsequently used to apply the composition to the hair, or selection of hair strands.

[0013] The device functions effectively and provides the maximum possible room in the container for the product to be dissolved/dispersed, along with the liquid in which the product is to be dissolved/dispersed, for the purpose of agitating the liquid to support the dissolving/dispersion processes if, similarly to Claim 3, the device is mounted at a connection point between the container and the mounting ring of the dispensing device.

[0014] If, according to Claim 4, there is a circumferential edge of the device clamped in between the mounting ring on the dispensing device and the upper end of a container neck, the device can be easily inserted into the container by placing it on the front of the container and then fixing it into position through placement of the dispensing device.

[0015] The container reservoir is suitable, in an advantageous manner, for collecting a product to color or bleach hair. In doing so, the product can be provided in the container in the form of a powder, a granular material, or a pasty mass to be dissolved/dispersed therein in a liquid, especially a hydrogen peroxide solution.

[0016] A particular advantage is achieved if, according to Claim 5, a centre part of the device, which is preferably circular, is free of any passage. The closed central part then protects the opening from the powder, granular material or cream to be dissolved/dispersed in a liquid during the shaking of the container to facilitate mixing. Whilst not wishing to be bound by theory, it is believed having a closed central part can prevent the powder/granular/pasty material from becoming lodged within the opening during the shaking process. With a round container neck, a rotationally symmetrical dispensing device, or a round device to hold back particles, a closed center part on the device enables the protection of the opening in a secure manner.

[0017] To increase the passage surface and thus achieve less outflow resistance after the components have been mixed, it is advantageous, in a known manner, if a recess is provided in the device (Claim 6). For space considerations, it is helpful to extend this recess up to the reservoir, as is known from the prior art. To keep the recess from extending too far into the reservoir, it is advantageous if, according to Claim 7, the recess forms a platform that is connected to the edge of the device via a circumferential flank and an annular connection area. Based on the results obtained in experiments, it is helpful, depending on the case, if round passages with a certain diameter as well as slot-shaped passages with a certain length and width are recessed in the device (Claim 8). If only slot-shaped passages are provided in the flank (Claim 9), smaller particles that move somewhat parallel with respect to the flank can better pass through the passages.

[0018] The proposed container is described in more detail in the following by means of figures representing the exemplary embodiments.

[0019] The following is shown:

[0020] FIG. 1 is a side view with a partial vertical section showing a container with a separate dispensing device, which has an opening to apply a dispensed agent, as known prior art;

[0021] FIG. 2 is a side view with a partial vertical section showing the container from FIG. 1, but with the dispensing device attached;

[0022] FIG. 3 is a side view with a partial vertical section showing the container from FIG. 1, but with a device inserted into the dispensing device to hold back larger particles or clumps of poorly dispersed particulates;

[0023] FIG. 4 is a side view with a partial vertical section showing the container from FIG. 3, but with the dispensing device attached;

[0024] FIG. 5 is a side view with a partial vertical section in another exemplary embodiment showing a container with a device that can be attached to the container neck;

[0025] FIG. 6 is a side view with a partial vertical section showing the container from FIG. 5, but with the dispensing device screwed on;

[0026] FIG. 7 is a side view with a partial vertical section showing the container from FIG. 4 with filled liquid and added granular product, wherein the granular product is pushed upward during the process of mixing via shaking the container;
FIG. 8 is a view from above showing a device to hold back particles or clumps of poorly dispersed particulates with a platform closed in the center from a recess and with passages of varying diameters which are less than or equal to the diameter or the minimum width of the opening.

FIG. 9 is a view from above showing a device that has six slot-shaped passages in a circumferential flank of a platform.

FIG. 10 is a view from above showing a device similar to that in FIG. 9, but with only four slot-shaped passages.

FIG. 11 is a vertical section showing the device from FIG. 10.

FIG. 12 is a view from above showing a flat device with passages that have two different diameters.

FIG. 13 is a view from above showing a device similar to that in FIG. 12, but with slot-shaped passages.

FIG. 14 is a view from above showing a device with a dome-shaped center without passages in the center.

FIG. 15 is a vertical section showing the device from FIG. 14.

FIG. 16 is a view from above showing a device with a closed center platform, an annular arrangement of round passages, and a plurality of slot-shaped passages in a circumferential flank of the platform.

FIG. 17 is a schematic vertical section showing the device from FIG. 16.

FIG. 18 is a view from above showing a device similar to that in FIG. 16, but with only four slot-shaped passages.

FIG. 19 is a vertical section showing the device from FIG. 18.

FIG. 20 is a view of the kit according to the invention.

FIG. 21 is a perspective view of the implement comprising marking tools according to the invention.

A reservoir 2 is used to collect a product 3 in a container 1 (FIG. 1, FIG. 2). A dispensing device 4 connected to the reservoir 2 has an opening 5 to dispense a flowable agent, particularly a powderly or granular product 3 to be dissolved/dispersed in a liquid 8. A connection 6 between the dispensing device 4 and the container 1 is designed as a plug connection with a snap-on cam 15. The dispensing device 4 is a spout 14 that can be attached to the container 1.

A plate-type device 7 inserted into the dispensing device 4 is used to hold back excessively large particles and/or clumps so that they cannot reach the opening 5 of the dispensing device 4 and cause the opening 5 to become clogged yet enable well dispersed particles to pass through (FIGS. 3 through 6). The device 7 is fixed into position using a mount 9 between the reservoir 2 and the dispensing device 4 and has a multiplicity of passages 10, which enable the passage of clump free mixed product 3 up to the opening 5. The multiplicity of passages are from about 3 to about 150 passages, more preferably from about 5 to about 100 passages and even more preferably from about 10 to about 75 passages.

The device 7 can be mounted to the dispensing device 4 in the area of a connection 6 between the container 1 and a mounting ring 16. In the exemplary embodiment from FIGS. 3 and 4, the device 7 is attached to the mounting ring 16 at an edge-side connection area 23. In the exemplary embodiment from FIGS. 5 and 6, the device 7 is placed on a container neck 18 designed specifically for this purpose before the dispensing device 4 is screwed onto the container 1 using a threaded connection 25. Once the dispensing device 4 is screwed into place, the circumferential connection area 23 of the device 7 is clamped between the mounting ring 16 and the upper end 17 of the container neck 18.

With the exemplary embodiment from FIG. 7, the edge-side connection area 23 of a round device 7 is clamped in the area of a mount 9 of the dispensing device 4. Common among all of the exemplary embodiments is that the diameter 11 or the minimum width 12 of the passages 10 is less than or equal to the diameter 13 or the minimum width of the opening 5 (FIGS. 8 through 19) in order to securely protect the opening 5 of the dispensing device 4 designed as a spout 14 from excessively large particles and/or clumps of a product 3 to be dissolved/dispersed in a liquid 8, yet enable the well dispersed particles to pass through the opening (FIG. 7). With the exemplary embodiment from FIG. 7, the reservoir 2 contains a peroxide solution as the liquid 8, in which a granular-type product 3, which is part of a persulfate bleaching composition, is added to be dispersed into the liquid 2. Shortly after the product 3 is added, a portion of the product 3 is better dispersed than the rest of the product 3. The areas which are poorly dispersed and which form clumps, which could clog the opening 5, cannot pass through the passages 10. These clumps cannot therefore clog up the opening 5. If a clump of the powder remains poorly dispersed after the mixing of a powderly product and if the solution is supposed to be dispersed through the opening 5, the liquid 8 along with well dispersed product 3 could pass through the device 7 and the opening 5 and only the large particles together with these clumps would be held back at the device 7 in order, thereby preventing the clogging of the opening 5.

If the center part 19 of the device 7 is designed without a passage 10 (FIGS. 8 through 11 and 14 through 19), a particle located in the center of the reservoir 2 is less likely to become lodged in the opening 5 during shaking. Whilst not wishing to be bound by theory, it believed that the act of shaking can lead to the powder particulates becoming compacted within the inside of the spout 14, forming a block which can then prevent dispensing through the opening. The device 7 designed without a passage 10 in the center part 19, reduces the chance of the powder particulates becoming compacted within the inside of the spout 14. A recess 20 in the device 71 enhances the surface area of the device 7 and enables a larger number of passages 10 to be present on the device 7 and hence a better dispensing of the liquid 8 from the spout 14.

Contrary to a flat design of the device 7 (FIGS. 3, 5, 7, 12, and 13), a device 7 may be designed as an arch and form a platform (21) that is connected to the edge of the device 7 via a circumferential flank 22 and an annular connection area 23 (FIGS. 8 to 11 and 16 through 19) or it can form a dome in the center (FIGS. 14 and 15). Such arch or dome designs may be oriented such that they extend upwards towards the opening 5 or more preferably down towards the reservoir 2. Round passages 10 with a certain diameter 11 as well as slot-shaped passages 10 with a certain length 24 and width 12 can be recessed in the device 7. With some of the exemplary embodiments (FIGS. 9, 10, 11, and 16 through 19), only slot-shaped passages 10 are provided in one flank 22 to achieve lower flow resistance of the device 7 for improved dispensing of the liquid 8. In general, a slot-shaped passage 10 is advantageous in that it only allows small particles to pass through and still offers a large passage area for the liquid 8 to be dispensed.

According to a further aspect of the present invention, for the purpose of sale and/or use, a kit (26) for creating
hair bundle effects may be assembled in a package, preferably a box (31) as shown in FIG. 20. In one embodiment as shown in FIG. 20, the kit (26) comprises the container (1) as disclosed herein and at least one product (3). Preferably the product (3) is a hair treatment composition. More preferably, the hair treatment composition is selected from the group consisting of highlighting compositions, dyeing compositions, perming compositions, styling compositions and combinations thereof. Even more preferably, the hair treatment composition is selected from the group consisting of highlighting compositions, dyeing compositions and combinations thereof, yet even more preferably the hair treatment composition is a highlighting composition. The highlighting composition is prepared by mixing a first component and a second component. The first component is preferably comprised within the container (1) whereas the second component is separately packed. The second component is then added to the first component to form a hair treatment composition. The first component preferably comprises from about 3% to about 12% of hydrogen peroxide by weight of the first component. The second component is preferably in the form of a powder, granules or paste and comprises from about 10% to about 60% of persulfate salt selected from the group consisting of sodium persulfate, potassium persulfate, ammonium persulfate and mixtures thereof, by weight of the second component. The kit (26) optionally comprises a third component comprising from about 3% to about 25% of an alkalizing agent in an aqueous vehicle, by weight of the third component.

In another embodiment of the present invention, the hair treatment composition is prepared by mixing a first component comprising from about 1.5% to about 12% of hydrogen peroxide by weight of the first component and a second component comprising from about 0.01% to about 6% of a dye selected from the group consisting of direct dyes, oxidative dye precursors, oxidative dye couplers and mixtures thereof, by weight of the second component.

The hair treatment compositions may further comprise components known, conventionally used, or otherwise effective for use in hair treatment compositions particularly oxidative bleaching and dye compositions which include but are not limited to: developer dye compounds; coupler dye compounds; direct dyes; oxidizing agents; reducing agents; thickeners; chelants; pH modifiers and buffering agents; alkalising agents, carbonate ion sources and radical scavenger systems; glycine; amodimethicone, ethylenediamine disuccinic acid; anionic, cationic, non-ionic, amphoteric or zwitterionic surfactants, or mixtures thereof; anionic, cationic, non-ionic, amphoteric or zwitterionic polymers, hydrophobically modified polymers or mixtures thereof; fragrances; dispersing agents; solvents, peroxide stabilizing agents; chelants, humectants, proteins and derivatives thereof, plant materials (e.g. aloe, chamomile and henna extract); silicones (volatile or non-volatile, modified or non-modified), film-forming agents, cellulose polymers and their derivatives, ceramides, preserving agents, gel networks, colour indicators and opacifiers. Some adjuvants which are suitable are listed in the International Cosmetics Ingredient Dictionary and Handbook, (8th ed.; The Cosmetics, Toiletry, and Fragrance Association). Particularly, vol. 2, sections 3 (Chemical Classes) and 4 (Functions) and are useful in identifying specific adjuvants to achieve a particular purpose or multipurpose. A representative but not exhaustive list of polymers and thickening agents can be found in "The Encyclopedia of Polymers and Thickeners for Cosmetics" compiled and edited by Robert Y. Lochhead, PhD and William R. Fron, Department of Polymer Science, University of Southern Mississippi.

The kit (26) may further comprise an applicator (27) for applying the hair treatment composition to the hair. The applicator (27) is selected from the group consisting of comb applicators, brush applicators, wand-like applicators, two-parts movably joined applicators and combinations thereof. Preferably the applicator is a two-part movably joined applicator as shown in FIG. 20.

The kit (26) may also comprise one or more marking tools (28; 29) for marking and separating a hair bundle from the remaining hair. Many types of marking tools (28; 29) can be used, including clips, such as those conventionally used for hair care. Preferably the marking tools (28; 29) are substantially flat as shown in FIG. 20.

In another embodiment, the kit (26) further comprises an implement (30), wherein the implement (30) comprises a plurality of marking tools (28; 29) for marking and separating a hair bundle from the remaining hair. Preferably, each marking tool of the plurality of marking tools (28; 29) is independently associated to but removable from the implement (30) as shown in FIG. 21. Finally, the kit (26) preferably comprises instructions (32).

1 Container
2 Reservoir
3 Product
4 Dispensing device
5 Opening
6 Connection
7 Device
8 Liquid
9 Mount
10 Passage
11 Diameter of passage
12 Width of passage
13 Diameter of opening
14 Spout
15 Snap-on cam
16 Mounting ring
17 End
18 Container neck
19 Center part
20 Recess
21 Platform
22 Flank
23 Connection area
24 Length of passage
25 Threaded connection
26 Kit
27 Applicator
28, 29 Marking tools
30 Implement
31 Box
32 Instructions

The dimensions and values disclosed herein are not to be understood as being strictly limited to the exact numerical values recited. Instead, unless otherwise specified, each such dimension is intended to mean both the recited value and a functionally equivalent range surrounding that value. For example, a dimension disclosed as “40 mm” is intended to mean “about 40 mm”.

Every document cited herein, including any cross referenced or related patent or application is hereby incorpo-
rated herein by reference in its entirety unless expressly excluded or otherwise limited. The citation of any document is not an admission that it is prior art with respect to any invention disclosed or claimed herein or that it alone, or in any combination with any other reference or references, teaches, suggests or discloses any such invention. Further, to the extent that any meaning or definition of a term in this document conflicts with any meaning or definition of the same term in a document incorporated by reference, the meaning or definition assigned to that term in this document shall govern.

[0085] While particular embodiments of the present invention have been illustrated and described, it would be obvious to those skilled in the art that various other changes and modifications can be made without departing from the spirit and scope of the invention. It is therefore intended to cover in the appended claims all such changes and modifications that are within the scope of this invention.

What is claimed is:

1. A container with a reservoir to collect a product, a dispensing device connected to the reservoir, wherein the dispensing device has an opening to dispense said product; a connection between the dispensing device and the container; as well as a device to hold back excessively large particles of said product, so that these particles cannot reach the opening of the dispensing device, and so that the opening cannot become clogged, wherein the device is fixed into position using a mount between the reservoir and the dispensing device, and the device has a multiplicity of passages, which enable the passage of smaller particles of said product through the opening, wherein the diameter of said passages is from about 0.5 mm to about 5 mm and is less than or equal to the diameter of said opening.

2. The container according to claim 1, wherein said dispensing device has a spout that can be attached or screwed onto said container.

3. The container according to claim 1, wherein said device is mounted at a connection between said container and a mounting ring of said dispensing device.

4. The container according to claim 3, wherein a circumferential connection area of said device is clamped between said mounting ring and the upper end of a container neck.

5. The container according to claim 1, wherein a centre part of said device is free of said passage.

6. The container according to claim 1, wherein a recess is provided in said device and that this recess extends down towards the reservoir.

7. The container according to claim 6, wherein said recess forms a platform, which is connected to the edge of the device via a circumferential flank and an annular connection area.

8. The container according to claim 1, wherein circular passages with a certain diameter as well as slot-shaped passages with a certain length and width are recessed in said device.

9. The container according to claim 8 wherein only slot-shaped passages are provided in the flank.

10. The container according to any of claims 1, wherein said device comprises from 3 to 150 passages (19).

11. The container according to claim 1, wherein said passage has a diameter or a minimum width of from about 1.0 to about 4.0 mm.

12. The container according to claim 11, wherein at least 80% of said passages have a diameter or minimum width of about 1.2 mm to about 3.5 mm.

13. A kit for creating hair bundle effects comprising at least one container according to claim 1 and at least one product which is a hair treatment composition selected from the group consisting of highlighting compositions, dyeing compositions, styling compositions, perming compositions and combinations thereof.

14. The kit according to claims 13, wherein the kit further comprises one or more marking tools for marking and separating a hair bundle from the remaining hair.

15. The kit according to claims 13, wherein the kit further comprises an applicator for applying the hair treatment composition to the hair, wherein the applicator is selected from the group consisting of comb applicators, brush applicators, wand-like applicators, two-parts movably joined applicators and combinations thereof.

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