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(54) **CONTAINER FOR COSMETIC PRODUCTS**

- (57) The container for cosmetic products is formed from a composition comprising one or more waxes or paraffin in a percentage by weight between 70% and 100%, for example, between 90% and 100%. The composition of the container may comprise different first and
- second waxes.

It allows to provide a container for cosmetic products formed from a composition comprising wax or paraffin for the most part and meeting the requirements of conventional containers made of glass, plastic, or metal.

Description

Object of the invention

[0001] The present invention relates to a container for cosmetic products, which is formed from a composition comprising wax or paraffin for the most part.

Background of the invention

[0002] Waxes and paraffins have a wide variety of uses, such as, for example, in the manufacture of candles, as a sealant for paper or food products, for the extraction of perfumes from flowers or as a base for chewing gum.

[0003] Candles are one of the main applications of wax and there are different ways to prepare them, depending on the type of candle that is made. Thus, there are waxes to fill, where it is poured melted into the final container; waxes for a pressed method, where the candle is pressed into the desired shape; candles manufactured by a extrusion method; by an immersion method; by a stretching method, where layers of wax are added until the required thickness is obtained; and by a casting method, for which molds are needed, which is the most difficult method of making candles.

[0004] Waxes and wax mixtures are widely used in the paper industry, for example in the production of cardboard and technical paper, flexible food containers, paper cups and disposable plates, etc.

[0005] Said waxes contribute to the resistance to water and humidity, offer shine, torsion effect, protection from grease and odors, etc. and they are used for impregnating, covering, coating, laminating, and as adhesives.

[0006] Waxes are also used in cosmetics due to their softening and protective properties; they are resistant to oxidation, humidity, and microbiological degradation. They are also used as emulsifiers and co-emulsifiers, and to provide stability and sensoriality to personal hygiene and beauty products. Waxes increase the viscosity and consistency of the mixtures in which they are included. In cosmetics they are also used as a method of hair removal.

[0007] Waxes are also used in agriculture, the rubber industry, and the textile industry.

[0008] On the other hand, the containers are usually made of glass, metal or plastic, since they must have the possibility of containing the product, they must preserve and protect the content, it cannot be mixed with the content of the container itself, that is, it must not interact with the product contained and kept inert, it must be hermetic and prevent leaks, it must present resistance, adaptation to automatic factory production and the cost of production and its sale price must be adequate.

[0009] Therefore, although wax is a product widely used in the industry, it is not used in the manufacture of containers because it is considered that it would not meet the requirements for a container.

Disclosure of the invention

[0010] Therefore, an object of the present invention is to provide a container for cosmetic products formed from a composition comprising wax or paraffin for the most part and meeting the requirements of conventional containers made of glass, plastic, or metal.

[0011] With the container for cosmetic products of the invention said disadvantages are solved, presenting other advantages that will be described below.

[0012] The container for cosmetic products according to the present invention is described in claim 1, and the dependent claims include additional features that are optional.

[0013] In particular, the container for cosmetic products is formed from a composition that comprises one or more waxes, preferably of vegetable origin, or paraffin, preferably of mineral origin, in a percentage by weight between 70% and 100%, for example, between 90% and 100%.

[0014] In addition, the container composition may comprise different first and second waxes, wherein the composition comprises the first wax in a percentage by weight between 50% and 75%, and the composition comprises the second wax in a percentage by weight between 25% and 50%.

[0015] If desired, the container composition may also comprise one or more additives, in a percentage by weight between 2% and 10%.

[0016] According to alternative embodiments, the container composition comprises 98% by weight of one or more waxes, or paraffin, and 2% of one or more additives, the container composition comprises 95% by weight of one or more waxes, or paraffin, and 5% of one or more additives, or the container composition comprises 90% by weight of one or more waxes, or paraffin, and 10% of one or more additives.

[0017] According to preferred embodiments, the wax or waxes are chosen from the following waxes: carnauba wax, candelilla wax, sunflower wax, cassava wax, and/or microcrystalline wax, and the one or more additives are chosen from the following: glyceryl behenate, glyceryl stearate, stearic acid, glycerin, shea butter, grapeseed oil, jojoba esters, coco caprylate/caprate, cocoa butter and/or caprylic capric triglycerides.

[0018] Therefore, a wax container is achieved that is not malleable below 50 °C, whose melting point is equal to or greater than 60 °C, and that crystallizes, achieving a smooth and seamless surface.

[0019] In addition, the container according to the present invention does not react or mix with the material contained therein, it is hermetic and allows the contents to be correctly preserved, and it is also resistant to be able to store it for at least 30 months.

Description of preferred embodiments

[0020] The container for cosmetic products according

to the present invention is formed from a composition that comprises between 90% and 100% by weight of waxes, preferably of vegetable origin, and/or paraffin, preferably of mineral origin.

[0021] The types of wax that can be used in the composition of the container for cosmetic products according to the present invention are the following: carnauba wax, candelilla wax, sunflower wax, cassava wax, and/or microcrystalline wax, in addition to paraffin.

[0022] The container composition according to the present invention may also comprise other additives to improve flexibility, resistance to cracking and to improve impact resistance, in a concentration between 2% and 10% by weight of the total composition.

[0023] These additives are, for example, glyceryl behenate, glyceryl stearate, stearic acid, glycerin, shea butter, grapeseed oil, jojoba esters, coco caprylate/caprate, cocoa butter and/or caprylic capric triglycerides.

[0024] By way of non-limiting examples, the following examples of the composition of the container of cosmetic products according to a present invention are provided:

- 100% by weight of carnauba wax;
- 98% by weight of carnauba wax + 2% by weight of grape seed oil;
- 100% by weight of candelilla wax;
- 98% by weight of candelilla wax + 2% by weight of shea butter;
- 50% by weight of candelilla wax + 50% of carnauba wax;
- 49% by weight of candelilla wax + 49% by weight of carnauba wax + 2% by weight of glyceryl behenate;
- 45% by weight of candelilla wax + 45% by weight of carnauba wax + 10% by weight of glyceryl behenate;
- 48% by weight of candelilla wax + 48% by weight of carnauba wax + 2% by weight of glyceryl behenate + 2% by weight of cocoa butter;
- 25% by weight of candelilla wax + 75% by weight of carnauba wax;
- 25% by weight of candelilla wax + 70% by weight of carnauba wax + 5% by weight of shea butter;
- 75% by weight of candelilla wax + 25% by weight of carnauba wax;
- 70% by weight of candelilla wax + 25% by weight of carnauba wax + 5% by weight of cocoa butter;
- 25% by weight of candelilla wax + 55% by weight of carnauba wax + 20% by weight of stearic acid;
- 100% by weight of paraffin;
- 100% by weight of microcrystalline wax;
- 100% by weight of sunflower wax;
- 100% by weight of cassava wax;
- 50% by weight of sunflower wax + 50% by weight of carnauba wax;
- 50% by weight of microcrystalline wax + 50% by weight of carnauba wax;
- 50% by weight of microcrystalline wax + 50% by weight of carnauba wax;
- 49% by weight of candelilla wax + 49% by weight of

- cassava wax + 2% by weight of glyceryl stearate;
- 35% by weight of candelilla wax + 35% by weight of carnauba wax + 30% by weight of glyceryl behenate;
- 60% by weight of candelilla wax + 10% by weight of carnauba wax + 30% by weight of clay;
- 60 % by weight of candelilla wax + 10 % by weight of carnauba wax + 30 % by weight of vegetable products (e.g. sawdust, seeds).

[0025] The container for cosmetic products according to the present invention can be manufactured according to different methods.

[0026] For example, it can be manufactured with a positive mold and a negative mold, and through the introduction of liquid wax each of the parts of the container is formed.

[0027] As another example, an ice mold can be used, into which hot wax is poured, and allowed to cool until it has achieved the necessary thickness, with the desired shape of the container.

[0028] As another example, from a flat sheet of wax, it is heated just to its molding point, before it is liquid and is pressed with a thermoforming mold.

[0029] Although reference has been made to specific embodiments of the invention, it is apparent to a person skilled in the art that the disclosed container for cosmetic products is susceptible of numerous variations and modifications, and that all the details mentioned can be replaced by other technically equivalents, without departing from the scope of protection defined by the appended claims.

Claims

1. Container for cosmetic products, **characterized in that** it is formed from a composition comprising one or more waxes or paraffin in a percentage by weight between 70% and 100%.
2. Container for cosmetic products according to claim 1, wherein the composition of the container comprises one or more waxes or paraffin in a percentage by weight between 90% and 100%.
3. Container for cosmetic products according to claim 1 or 2, wherein the composition of the container comprises different first and second waxes.
4. Container for cosmetic products according to claim 3, wherein the composition comprises the first wax in a percentage by weight between 50% and 75%.
5. Container for cosmetic products according to claim 3 or 4, wherein the composition comprises the second wax in a percentage by weight between 25% and 50%.

6. Container for cosmetic products according to any one of the preceding claims, wherein the composition of the container also comprises one or more additives, in a percentage by weight comprising between 2% and 10%. 5
7. Container for cosmetic products according to any one of the preceding claims, wherein the composition of the container comprises 98% by weight of one or more waxes, or paraffin, and 2% of one or more additives. 10
8. Container for cosmetic products according to any one of claims 1 to 6, wherein the composition of the container comprises 95% by weight of one or more waxes, or paraffin, and 5% of one or more additives. 15
9. Container for cosmetic products according to any one of claims 1 to 6, wherein the composition of the container comprises 90% by weight of one or more waxes, or paraffin, and 10% of one or more additives. 20
10. Container for cosmetic products according to any one of the preceding claims, wherein the wax or waxes are of vegetable origin. 25
11. Container for cosmetic products according to any one of the preceding claims, wherein the wax or waxes are chosen from the following waxes: carnauba wax, candelilla wax, sunflower wax, yucca wax, and/or microcrystalline wax. 30
12. Container for cosmetic products according to any one of the preceding claims, wherein the paraffin is of mineral origin. 35
13. Container for cosmetic products according to any one of claims 5 to 12, wherein the one or more additives are selected from the following: glyceryl behenate, glyceryl stearate, stearic acid, glycerin, shea butter, kernel oil grape, jojoba esters, coconut caprylate/caprate, cocoa butter, capric caprylic triglycerides, clay, sawdust and/or seeds. 40

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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2012/315362 A1 (DALE ROSS DEAN [US] ET AL) 13 December 2012 (2012-12-13) * abstract * * paragraph [0022] - paragraph [0024] * * claim 9 * * figures *	1-3, 6-11, 13	INV. A45D34/00 B65D65/46
X	EP 0 546 699 A1 (GRACE W R & CO [US]) 16 June 1993 (1993-06-16) * column 4, line 7 - line 22 * * example 2 *	1-5, 12	
X	US 2020/010254 A1 (MANSUR LOPES FUAD [BR]) 9 January 2020 (2020-01-09) * abstract * * claim 8 * * figures 1, 4 *	1, 2, 12	
X	KR 102 358 258 B1 (LEE JI HYUN [KR]) 8 February 2022 (2022-02-08) * abstract *	1, 2	TECHNICAL FIELDS SEARCHED (IPC)
X	RU 2007 132958 A (EVTEEV VLADIMIR ANDREEVICH [RU]) 10 March 2009 (2009-03-10) * abstract *	1	A45D B65D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 27 July 2023	Examiner Zetzsche, Brigitta
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

27-07-2023

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2012315362 A1	13-12-2012	NONE	
<hr/>			
EP 0546699 A1	16-06-1993	AT 149986 T	15-03-1997
		AU 661063 B2	13-07-1995
		CA 2082983 A1	19-05-1993
		DE 69218136 T2	03-07-1997
		EP 0546699 A1	16-06-1993
		ES 2100306 T3	16-06-1997
		HK 1001687 A1	03-07-1998
		JP H05301752 A	16-11-1993
		MY 130088 A	31-05-2007
		NZ 245072 A	22-12-1994
		TW 223048 B	21-05-1994
<hr/>			
US 2020010254 A1	09-01-2020	BR 102018013942 A2	21-01-2020
		US 2020010254 A1	09-01-2020
<hr/>			
KR 102358258 B1	08-02-2022	KR 102358258 B1	08-02-2022
		KR 20220124085 A	13-09-2022
<hr/>			
RU 2007132958 A	10-03-2009	NONE	
<hr/>			

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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82