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(54) Titre : TYPE DE METHODE DE PREPARATION DE LIQUIDE POUR CIGARETTES ELECTRONIQUES
(54) Title: A KIND OF PREPARATION METHOD OF E-CIGARETTE LIQUID

(57) Abrégé/Abstract:
This invention relates to a kind of preparation method of E-cigarette liquid. The process is as follows. First, put the tobacco with the amount of 5-20% of E-cigarette liquid volume into the extracting tank and add the mixed solvent into the tank to soak the tobacco for 30-100 minutes. Then, heat the mixture up to 40-60°C and extract with warm soak for 2-8 hours. Filter the extract and add chocolate extractive with the amount of 1-10% of the E-cigarette liquid volume into the filtrate and stir it for 20-40 minutes. Then use propylene glycol or polyethylene glycol to complement the E-cigarette liquid volume with 100% planning preparation and stir uniformly to get the product. Letting the natural aroma elements of tobacco enter the E-cigarette liquid, this method makes the aroma and taste come from the tobacco and be closer to those of cigarettes, which can cater to the smoking feeling of customers and makes the time much longer for keeping the natural aroma in cigarette liquid.

Abstract of Specification

This invention relates to a kind of preparation method of E-cigarette liquid. The process is as follows. First, put the tobacco with the amount of 5-20% of E-cigarette liquid volume into the extracting tank and add the mixed solvent into the tank to soak the tobacco for 30-100 minutes. Then, heat the mixture up to 40-60℃ and extract with warm soak for 2-8 hours. Filter the extract and add chocolate extractive with the amount of 1-10% of the E-cigarette liquid volume into the filtrate and stir it for 20-40 minutes. Then use propylene glycol or polyethylene glycol to complement the E-cigarette liquid volume with 100% planning preparation and stir uniformly to get the product. Letting the natural aroma elements of tobacco enter the E-cigarette liquid, this method makes the aroma and taste come from the tobacco and be closer to those of cigarettes, which can cater to the smoking feeling of customers and makes the time much longer for keeping the natural aroma in cigarette liquid.

Specification

A Kind of Preparation Method of E-Cigarette Liquid

Field of Technology

This invention relates to a kind of preparation method of E-cigarette liquid which belongs to the field of chemical preparing technology.

Background Technology

E-cigarette liquid (or E-cigarette atomizing liquid) is the popular cigarette substitute product currently. Concerning the mixing prescription, preparation process, health caring function and other aspects of E-cigarette liquid, there has been many documentary or patented reports. Mixed by 25-90 proportions of polyethylene glycol, 9-50 proportions of propylene glycol and 0.3-52 proportions of taste regulator, a kind of electronic simulation cigarette atomizing liquid disclosed by Chinese patent 200910104922.6 belongs to typical essence and spice mixing products. Mixed by 3-5%w/v of tobacco extractive, 3-5% w/v of tobacco spice, 0-3% w/v of nicotine, 0.2-1% w/v of stabilizing agent, 3-8% w/v of thickener, 5-10% w/v of pure water, 50-70% w/v of propylene glycol and other elements like codeine phosphate, chlortrimeton etc., though it uses tobacco extractive, the electronic cigarette atomizing liquid disclosed by Chinese patent 200910310536.2 is still the product that imitates cigarette taste and mixes by tobacco extractive as well as other spices. Due to the reason that more and more smokers begin to adopt E-cigarette to replace cigarette, some shortcomings of the electronic cigarette liquid used in these E-cigarettes become more obvious. It is generally reflected by smokers that although E-cigarettes have the similar appearance, feeling and smog like those of cigarettes, there is a rather wide gap between them in the aspects of aroma and taste, especially the products mixed by various essence and spices that make smokers feel hard to accept or get used to. In addition, it is also the general problem of users that it is difficult for current aroma elements of E-cigarette liquid to retain for a long time that the best ones can only be kept for about half a year during which the “smell of cigarette” will become thin or just disappear. Those shortcomings influence the quality of E-cigarette to a great extent and restrict the popularity and prevalence of E-cigarette meanwhile.

Contents of Invention

Aiming at the shortcomings like bad aroma and taste, short time for keeping the essence etc. existing in the E-cigarettes, the purpose of this invention is to provide a kind of preparation method of E-cigarette liquid. Letting the natural aroma elements of tobacco enter the E-cigarette liquid, this method makes the aroma and taste come from the tobacco and be closer to those of cigarettes, which can cater to the smoking feeling of customers and makes the time much longer for keeping the natural aroma in cigarette liquid.

This Invention Will Be Implemented According to the Technical Proposals Below

Certain amount of E-cigarette liquid should be prepared according to the plan. First, get the tobacco (weight) with 5-20% (w/v) of E-cigarette liquid amount (volume) and put into the extracting tank. Then add the mixed solvent into the tank and soak the tobacco for 30-100 minutes. After heating it up to 40-60℃ and extract with warm soak for 2-8 hours, filter the extract and get the filtrate. Then add chocolate extract with the amount of 1-10% (w/v) of the E-cigarette liquid into the filtrate and stir the mixture for 20-40 minutes. After that, complement the E-cigarette liquid volume of 100% planning preparation with propylene glycol or polyethylene glycol and stir them until mix uniformly to finish the product.

The preparation of the solvent above is to respectively get the propylene glycol and/or polyethylene glycol with the amount of 30-80% of the E-cigarette liquid volume and 0.1-0.5% of tween 80, and then stir them for 20-40 minutes to get the uniformly mixed solvent;

The preparation of chocolate extractive above includes the following steps. Smash the chocolate to 20-60 sections and put into the extracting tank with interlayer, add distilled water of which the weight is 3-10 times of the chocolate powder, soak the powder for 30-90 minutes and heat it up to 80-90℃, extract with heat preservation for 2-6 hours, pour out and filter the extract and keep the residue for other functions, then decompress and concentrate the extract to the extract with the proportion of 1.1-1.4 to get the chocolate extractive;

The propylene glycol or polyethylene glycol solvent and tween 80 above are all with the officinal or edible level, among which propylene glycol and polyethylene glycol can

be used solely as well as in combination.

Advantages and Positive Effect Compared with Public Technology

There are two reasons for using propylene glycol or polyethylene glycol solvent with tween 80 as the extract and directly extracting tobacco in comparatively mild conditions. First, the aroma elements of tobacco can directly enter the extract. Second, extracting tobacco in mild conditions can avoid the loss and damage of some tobacco aroma elements that are easily-volatilized or sensitive to temperature under the conditions of complex process and high-temperature concentration. In addition, comparing with other common solvent that extracts aroma elements, propylene glycol or polyethylene glycol solvent can better keep the aroma due to their high viscosity and certain moisturizing function. After used by a large number of customers, this product is commonly preferred by them because the taste is close to the cigarette and the aroma can be well kept even when the product is kept for two to three years.

Specific Ways of Implementation

Case 1: Plan to prepare 500 liters of E-cigarette liquid. Get 50 kilograms of tobacco and put into the extracting tank with interlayer; respectively get 350 liters of propylene glycol and 1 liter of tween 80, then pour the latter into the former and stir the mixture for 30 minutes. Add the mixed liquor into the extracting tank and soak the tobacco for 50 minutes. Then use steam to heat it up to 50℃ through the interlayer. After extracting with heat preservation for 4 hours, pour out the extract and filter it to get the filtrate. Add 18 kilograms of chocolate extractive into the filtrate and stir the mixture for 30 minutes. Then add 500 liters of propylene glycol into the filtrate to complement the planning preparation and stir the mixture for 35 minutes to get the E-cigarette liquid.

Case 2: Plan to prepare 500 liters of E-cigarette liquid. Get 50 kilograms of tobacco and put into the extracting tank with interlayer; get and mix 380 liters of propylene glycol and polyethylene glycol according to the proportion of 1:1, and get 1.5 liters of tween 80. Pour the tween 80 into the mixture of propylene glycol and polyethylene glycol and stir it for 40 minutes and then add it to the extracting tank and soak the tobacco for 60 minutes. Use steam to heat it up to 60℃ through the interlayer. After extracting with heat preservation for 6 hours, pour out the extract and filter it to

get the filtrate. Add 20 kilograms of chocolate extractive into the filtrate and stir the mixture for 40 minutes. Then add 500 liters of polyethylene glycol into the filtrate and stir the mixture for 30 minutes to get the E-cigarette liquid.

Claims

1. The characteristics of the preparation method of E-cigarette liquid lie in: it is implemented according to the following technical proposals,

Get the tobacco with 5-20% of E-cigarette liquid amount and put into the extracting tank. Then add the mixed solvent into the tank and soak the tobacco for 30-100 minutes. After heating it up to 40-60℃ and extract with warm soak for 2-8 hours, filter the extract. Then add chocolate extract with the amount of 1-10% w/v of the E-cigarette liquid into the filtrate and stir the mixture for 20-40 minutes. After that, complement the E-cigarette liquid volume of 100% planning preparation with propylene glycol or polyethylene glycol and stir them until mix uniformly to get the product;

2. According to the preparation method of E-cigarette liquid stated in claim 1, its characteristics lie in: the preparation of the solvent is to respectively get the propylene glycol and/or polyethylene glycol with the amount of 30-80% of the E-cigarette liquid volume and 0.1-0.5% of tween 80, and then stir them for 20-40 minutes to get the uniformly mixed solvent;

3. According to the preparation method of E-cigarette liquid stated in claim 1, its characteristics lie in: the preparation of chocolate extractive above includes the following steps. Smash the chocolate to 20-60 sections and put into the extracting tank with interlayer, add distilled water of which the weight is 3-10 times of the chocolate powder, soak the powder for 30-90 minutes and heat it up to 80-90℃, extract with heat preservation for 2-6 hours, pour out and filter the extract, then decompress and concentrate the extract to the extract with the proportion of 1.1-1.4 to get the chocolate extractive;

4. According to the preparation method of E-cigarette liquid stated in claim 1, its characteristics lie in: the propylene glycol or polyethylene glycol solvent and tween 80 are all with the officinal or edible level, among which propylene glycol and polyethylene glycol can be used solely as well as in combination.