



MINISTRY OF HEALTH OF UKRAINE
NATIONAL UNIVERSITY OF PHARMACY
DEPARTMENT OF PHARMACEUTICAL TECHNOLOGY OF DRUGS



TECHNOLOGY OF EXTEMPORAL HOMEOPATHIC MEDICINES





PLAN OF THE LECTURE

- 1. Distribution of homeopathic medicines by dosage form.**
- 2. Homeopathic matrix remedies. Technology. Quality control.**
- 3. Homeopathic dilution. Technology. Registration before vacation.**
- 4. Homeopathic oils. Technology. Registration before vacation.**
- 5. Homeopathic granules. Technology. Registration before vacation.**
- 6. Homeopathic tablets. Technology.**
- 7. Homeopathic triturations. Technology. Registration before vacation.**

Basic homeopathic medicines (stocks)

substances, products or preparations used as starting materials for the production of homeopathic medicines. Basic preparations are usually: for raw materials of vegetable, animal or human origin - matrix tincture or glycerin macerate; for raw materials of chemical or mineral origin - the substance itself.



HOMEOPATHIC RAW MATERIALS

a substance (substance) of plant, mineral, animal, microbial origin, physiological secretions of animals and humans, other biological substrates and synthetic substances necessary for the production of GmLZ. Raw materials of vegetable, animal or human origin can be used in fresh or dried form. Sometimes it is allowed to store fresh material in frozen form.



HOMEOPATHIC MATRIX REMEDIES (lat. praeparata homeopatica materna)

substances, products or means used as raw materials for the production of homeopathic medicinal products. Homeopathic matrix means (alcohol, glycerin or water macerate) — for raw materials of plant or animal origin, nosodes and the substance itself — for raw materials of mineral and synthetic origin.



Stinging nettle matrix tincture– 5,0 ***Tincturae maternae Urtica urens– 5,0***

- ❑ Technology. Crushed medicinal plant raw materials are squeezed. The resulting juice is weighed and immediately mixed with an equal amount of 90% ethanol by mass. It is kept in a closed container at a temperature not higher than 20 ° C for at least five days, after which it is filtered.
- ❑ The prepared matrix tincture is a basic homeopathic preparation, it is not released to patients.

LABELLING

- ❑ Labeled (name of raw materials in Latin, designation of matrix tincture Ø, weight, date of production, ratio of raw materials and alcohol).
- ❑ This basic drug is further used for the manufacture of homeopathic dosage forms for the treatment of burns and urticaria.



QUALITY CONTROL

- ❑ Quality control of basic homeopathic medicines for internal use is carried out according to general indicators: appearance (transparency, color), smell, relative density, alcohol concentration, identification and quantitative analysis of active substances, if specified in separate articles.
- ❑ Deviations in the content of medicinal substances in the solution (if there are no other indications in the articles) should not exceed:
- ❑ + 5% at a content of 10% or 1% of the substance (first or second decimal dilution), respectively;
- ❑ + 10% at a content of 0.1% of the substance (third decimal dilution).
- ❑ After the manufacture of homeopathic basic drugs, their mass should not exceed the permissible deviations.

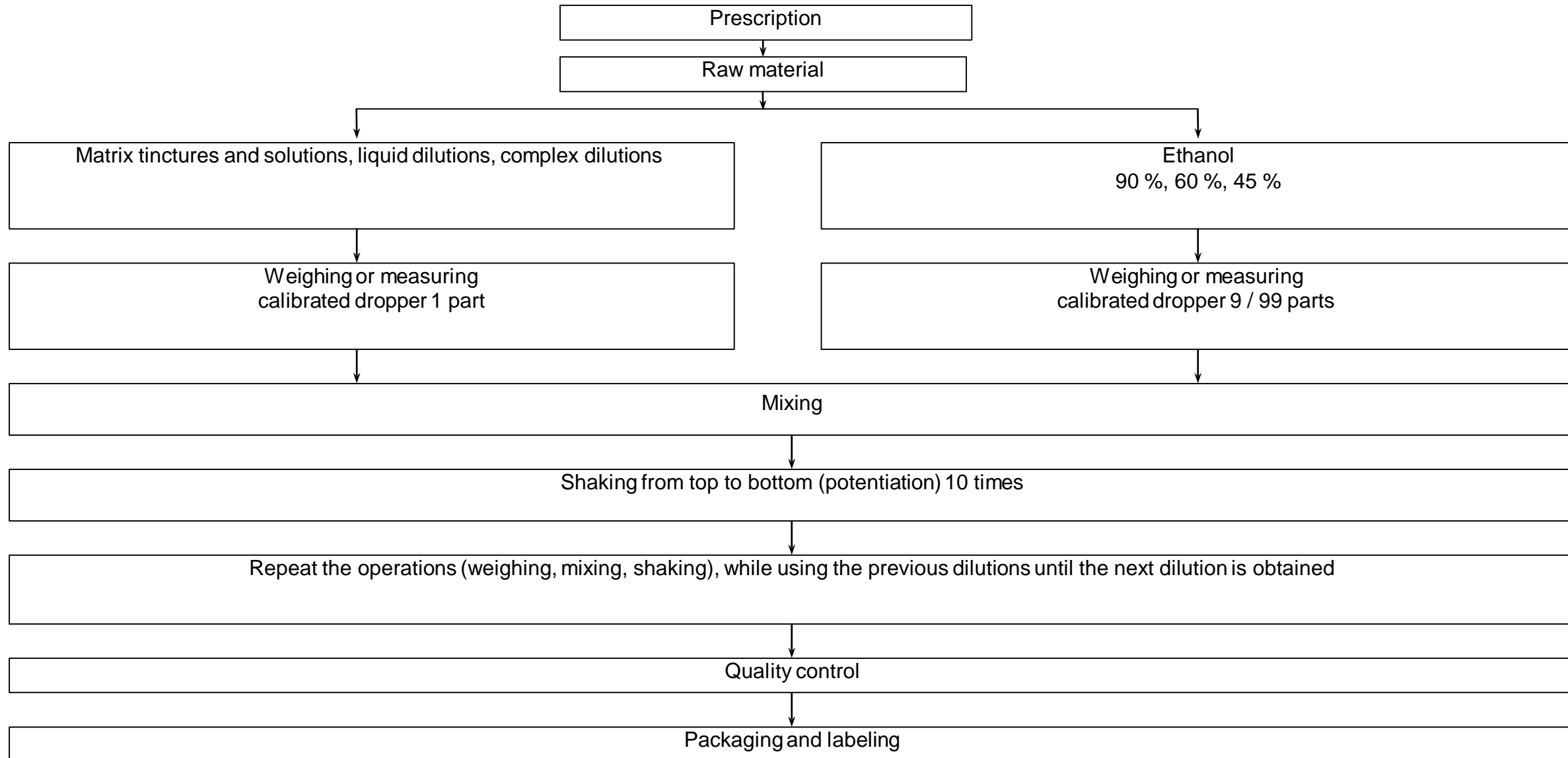
Homeopathic dilution

(lat. solutio (dilutio)
homeopathica)

a liquid or powder dosage form obtained from the base drug by potentiation, used for the production of homeopathic drugs, creates an appropriate concentration of substances and ensures the optimal pharmacotherapeutic effect of drugs selected according to the principle of similarity. Homeopathic dilutions are divided into hundredth, decimal and LM dilutions.



ALGORITHM OF THE TECHNOLOGY OF LIQUID DILUTIONS (POTENTIES)



**Stamp of the medical and preventive institution.
Date, full name, age of the patient.
Full name of the doctor**

Doctor's signature

Doctor's personal seal

Dilutio Aloe X3 – 10,0

D. S. 5-7 drops 30 minutes before meals

Characteristics of the medicinal product.

Medicinal product is homeopathic drops, the composition of which includes raw materials of plant origin Aloe.

Technology

Written control passport (WCP), reverse side

Dilution of Aloe X1: 1.0 g

Dilution of Aloe X2: 1.0 g

45% ethyl alcohol for making X2 dilution: 9.0 g

Ethyl alcohol 45% for making X3 dilution: 9.0 g

Technology. Place 2 vials with stoppers on the table, number them (X2, X3). 9.0 g of ethyl alcohol 45% is weighed into each bottle. Then, 1.0 g of Aloe X1 dilution is weighed into the bottle marked X2, closed with a lid and vigorously shaken from top to bottom 10 times (potentization). After that, 1.0 g of dilution is added from the bottle X2 to the bottle labeled X3, stoppered and shaken from top to bottom 10 times (potentization). Paste the recipe number. Fill out the WCP (front side).

WCP, front side

WCP (front side)

Date № of

prescription

Aethanoli 45% 9,0

Dilutio Abx 1,0

m = 10,0

Prepared by(signature)

Checked by (signature)

Dispensed by (signature)



Labelling

Labels: "Internal", "Store in a cool place protected from light", "Keep out of reach of children"

This homeopathic medicine is used to treat diarrhea and hemorrhoids



**Stamp of the medical and preventive institution.
Date, full name, age of the patient.
Full name of the doctor**

Doctor's signature

Doctor's personal seal

Dilutio Rubus C3 – 10,0

D. S. По 7-10 капель згідно до розкладу

Characteristics of the medicinal product.

Homeopathic drops, the composition of which includes raw materials of plant origin Blackberry.

Technology

WCP (reverse side)

Matrix tincture "Rubus θ ": 0.2 g (6 drops)

Rubus C1 dilution: 0.1 g (3 drops)

Rubus C2 dilution: 0.1 g (3 drops)

45% ethyl alcohol for making C1 dilution: 9.8 g

45% ethyl alcohol for making C2 dilution: 9.9 g

Ethyl alcohol 45% for making C3 dilution: 9.9 g

Technology. Place 3 vials with stoppers on the table, number them (C1, C2, C3). 9.8 g of 45% ethyl alcohol is weighed into the first bottle (C1), 9.9 g of 45% ethyl alcohol is weighed into the other two (C2, C3). Then, 0.2 g (6 drops) of the matrix tincture "Rubus θ " is weighed into the bottle marked C1, closed with a lid and vigorously shaken from top to bottom 10 times (potentization). After that, add 0.1 g (3 drops) of the dilution from bottle C1 to the bottle labeled C2 and shake again from top to bottom 10 times (potentize). Next, 0.1 g (3 drops) of dilution C2 is weighed into the bottle C3, stoppered, potentized 10 times. Paste the recipe number. Fill out the WCP (front side).

Technology

WCP (Front side)

Date № of
prescription Aethanoli
45 % 9,9

Dilutio Rubus C2 0.1 (gtts. III)
m = 10,0

Prepared by(signature)

Checked by (signature)

Dispensed by (signature)

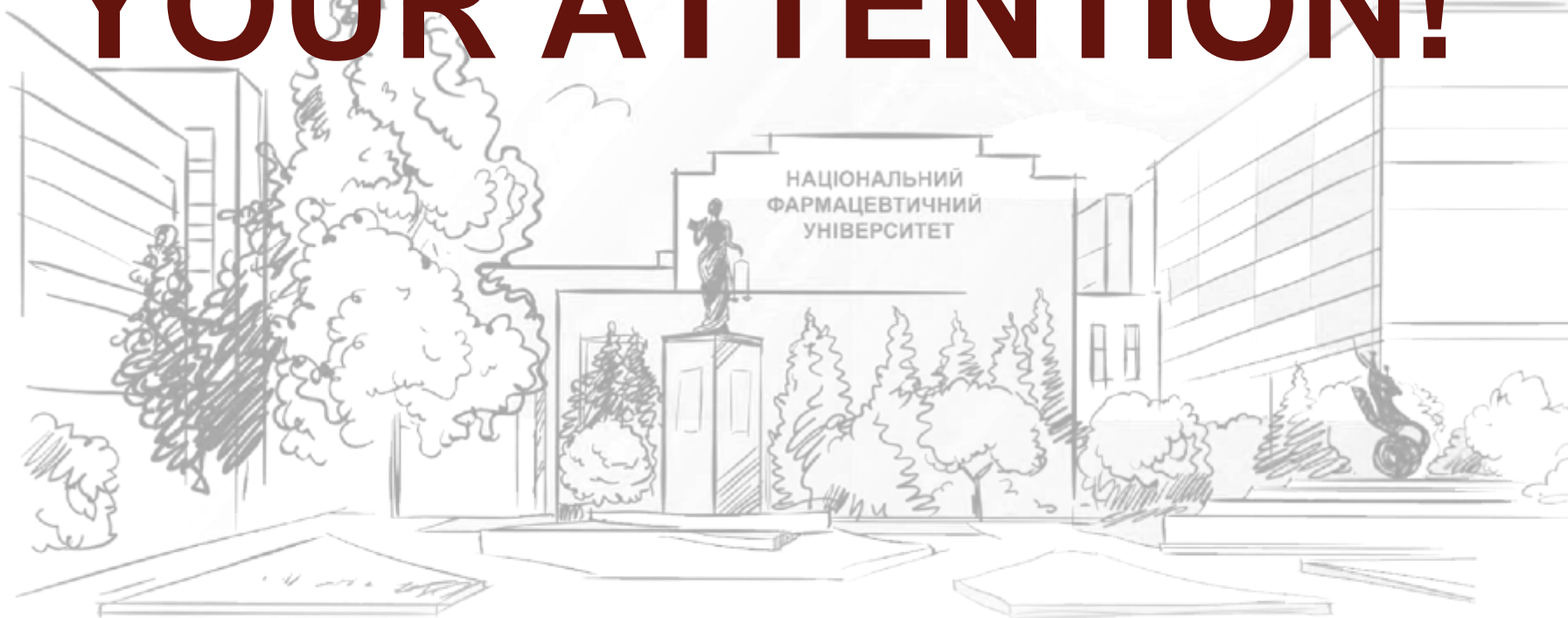
Labelling

Labels: "Internal", "Store in a cool place protected from light", "Keep out of reach of children".

This homeopathic preparation is used for the treatment and prevention of climacteric conditions



THANK YOU FOR YOUR ATTENTION!



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<https://nuph.edu.ua>



***Dilution based on the raw material of
mineral origin***

**Stamp of the medical and preventive institution.
Date, full name, age of the patient.
Full name of the doctor**

Doctor's signature

Doctor's personal seal

**Dilutio Magnesium sulfuricum X3 – 10,0
D. S. 10 drops of dinner 30 minutes before meals**

Characteristics

Homeopathic drops, the composition of which includes raw materials of mineral origin Magnesium sulfate.

Technology

WCP (reverse side)

Magnesium sulfuricum substances: 1.0 g

Dilution of Magnesium sulfuricum X1: 1.0 g

Dilution of Magnesium sulfuricum X2: 1.0 g

Ethyl alcohol 45% for making dilution X1: 9.0 g

45% ethyl alcohol for making X2 dilution: 9.0 g

Ethyl alcohol 45% for making X3 dilution: 9.0 g

Technology. Place 3 vials with stoppers on the table, number them (X1, X2, X3). 9.0 g of ethyl alcohol 45% is weighed into each bottle. Then, 1.0 g of Magnesium sulfuricum substance is weighed into the bottle marked X1, closed with a lid and vigorously shaken from top to bottom 10 times (potentization). After that, 1.0 g of dilution is added from the bottle X1 to the bottle labeled X2 and shaken again from top to bottom 10 times (potentization). Next, 1.0 g of X2 dilution is weighed into the X3 vial, sealed, and potentized 10 times. Paste the recipe number. Fill out the WCP (front side).

WCP (front side)

Date No. of prescription

Aethanoli 45 % 9,0

Dilutio Magnesium sulfuricum X2 1.0

m = 10,0

Prepared by(signature)

Checked by (signature)

Dispensed by (signature)

Labeling

Labels: "Internal", "Store in a cool place protected from light", "Keep out of reach of children".

This homeopathic preparation is used to treat gastroenterocolitis and nervous dyspepsia



HOMEOPATHIC OILS

Homeopathic oils (Olea) are prescribed only for external use in the form of 10% solutions of medicines in olive, almond, sunflower, vaseline oils, etc. They are prepared according to general rules, dissolving medicinal substances in oils or, most often, by mixing a certain amount of X1 tincture with oil with vigorous shaking.

However, for a number of oils, the concentration of the initial tincture differs from the standard (0.5%, 1%, 3%).

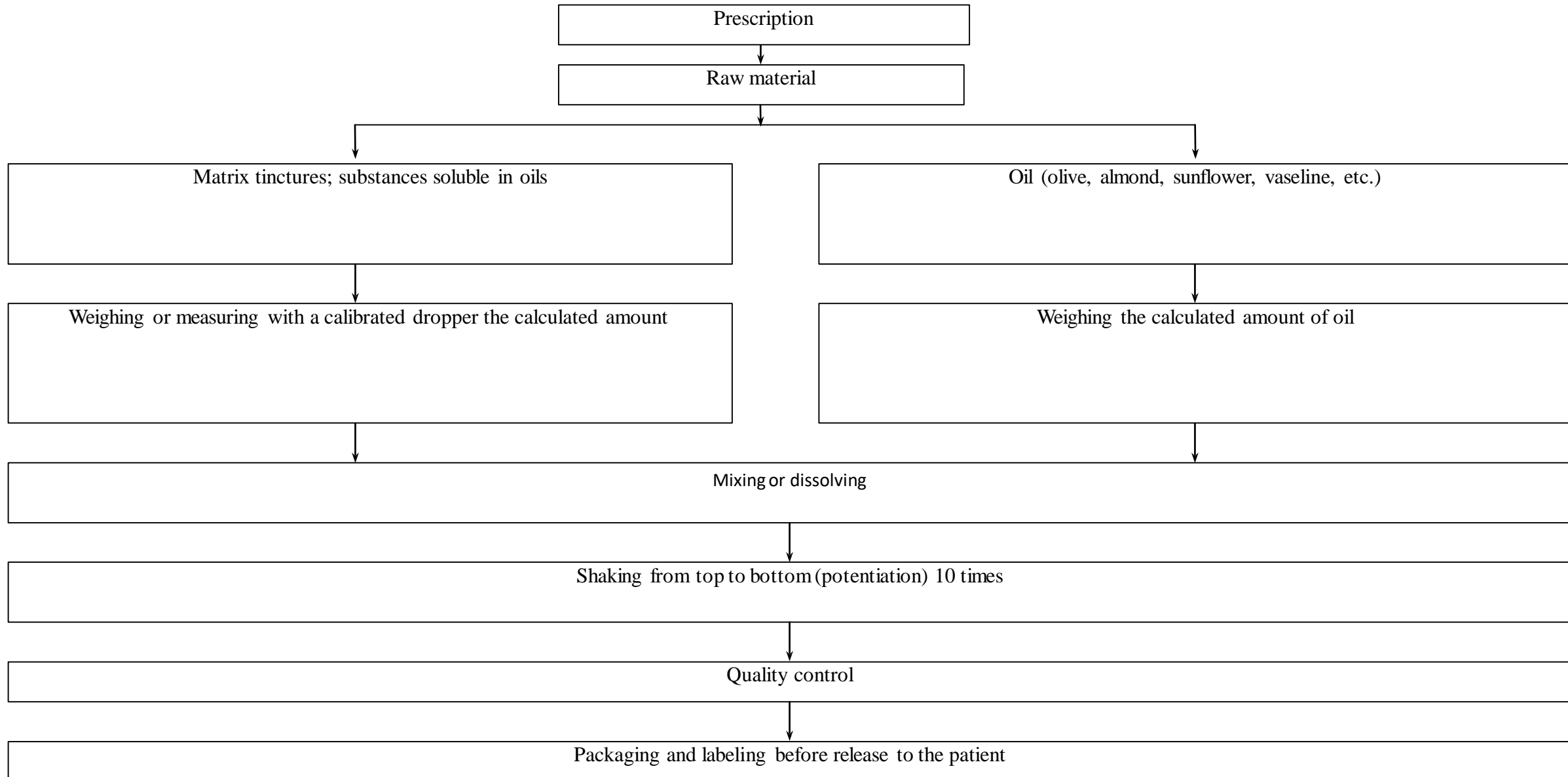
The following oils are most often prescribed:

- oleum Apis 3%;
- oleum Aconitum 5%;
- oleum Bryoniae 10%;
- oleum Hamamelis 10%;
- oleum Calendulae 10%;



Quality control of oils is carried out according to general indicators (homogeneity, conformity of color and smell, absence of mechanical inclusions).

ALGORITHM OF THE TECHNOLOGY OF HOMEOPATHIC OILS



Stamp of the medical and preventive institution.

Date, full name, age of the patient.

Full name of the doctor

Doctor's signature

Doctor's personal seal

Oleum Ledum 10 % – 5,0

D. S. For lubrication of affected skin surfaces

Characteristics of the medicinal product.

Homeopathic oil, the composition of which includes raw materials of plant origin Bagn ordinary. As a solvent, you can use sunflower, vaseline, or almond, olive, apricot, grape, etc. oils.

WCP (reverse side)

Ledum matrix tincture Q: 0.5 g (16 drops)

10,0 – 100,0

X– 5,0; x = 0,5

1,0 g of ledum matrix tincture equals 32 drops

Sunflower oil: $5,0 - 0,5 = 4.5$ g

Technology. Weigh 4.5 g of sunflower oil into a previously weighed wide-mouthed bottle and add 16 drops (0.5 g) of Ledum matrix tincture Q, stopper, and potentize 10 times. Paste the recipe number. Fill out the PPK (front side).

WCP (front side)

Date No. of prescription

Olei Helianthi 4,5

Ledum 0.5 (gtts. XVI)

m = 5,0

Prepared by(signature)

Checked by (signature)

Dispensed by (signature)

Labeling

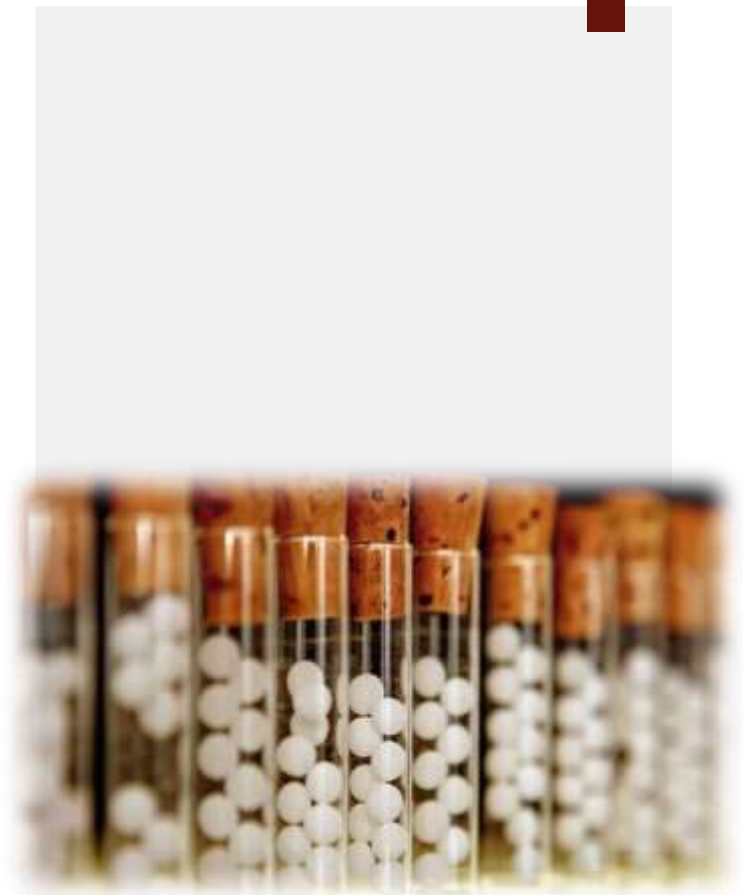
Labels: "External use", "Store in a cool place protected from light", "Shake before use", "Keep out of reach of children".

This homeopathic preparation is used to treat puncture wounds and insect bites

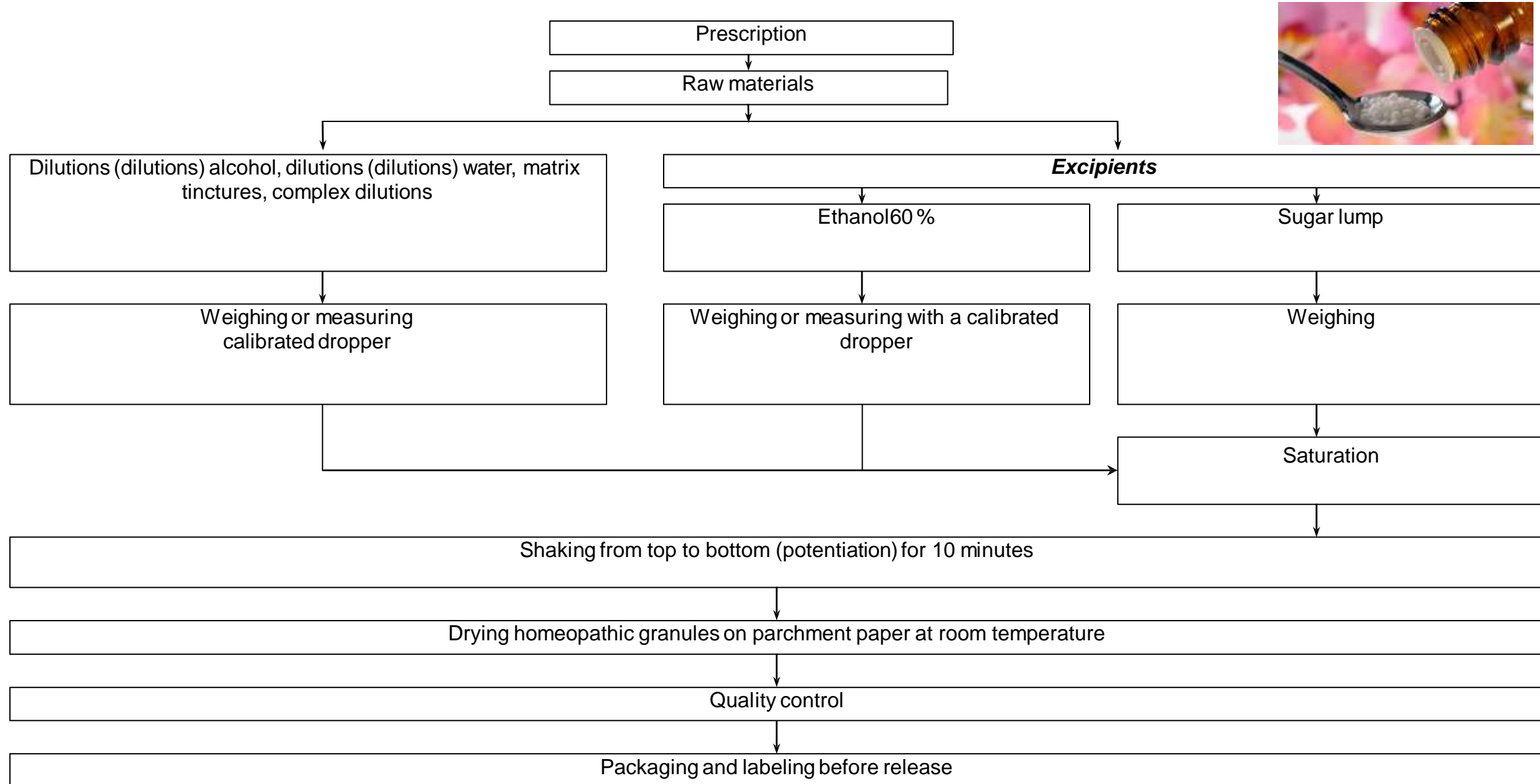


HOMEOPATHIC GRANULES (Lat. granula homeopathica)

dosage form for internal use, consisting of solid, dry, fairly strong aggregates of dry powders, on which a potentiated solution is applied, in the form of round, cylindrical or irregularly shaped granules.



ALGORITHM OF HOMEOPATHIC GRANULES TECHNOLOGY



**Stamp of the medical and preventive institution.
Date, full name, age of the patient.
Full name of the doctor**

Doctor's signature

Doctor's personal seal

**Granulae Thuja C12 10,0
D. S. 8 granules 3 times a day**

Characteristics of the medicinal product.

Homeopathic granules, the composition of which includes raw materials of plant origin Thuja western.

WCP (reverse side)

Sugar granule 10.0 g

Thuja C11 dilution: 0.1 g (3 drops)

60% ethyl alcohol for moistening sugar granules: 0.1 g (3 drops)

Technology. To make 10.0 homeopathic granules of Thuja C12, weigh 10.0 sugar granules in a bottle with a capacity of 30.0 and add 0.1 (3 drops) of 60% ethyl alcohol, shake several times to moisten the sugar granules. After that, 0.1 (3 drops) of homeopathic dilution of Thuja C11 is added, the bottle is closed with a lid wrapped in parchment paper and intensively shaken (potentized) for 10 minutes. Next, the granules are poured onto parchment paper and dried at room temperature. Ready homeopathic granules are transferred to a bottle for dispensing. Paste the prescription number. Fill in the WCP (front side).

WCP (front side)

Date No. of prescription

Granulae saccharati 10,0

Spiritus aethylici 60 % gtts. I(0,1) Dil.

Thuja C11 gtts. III (0,1)

m = 10,0

Prepared by(signature)

Checked by (signature)

Dispensed by (signature)



Labeling

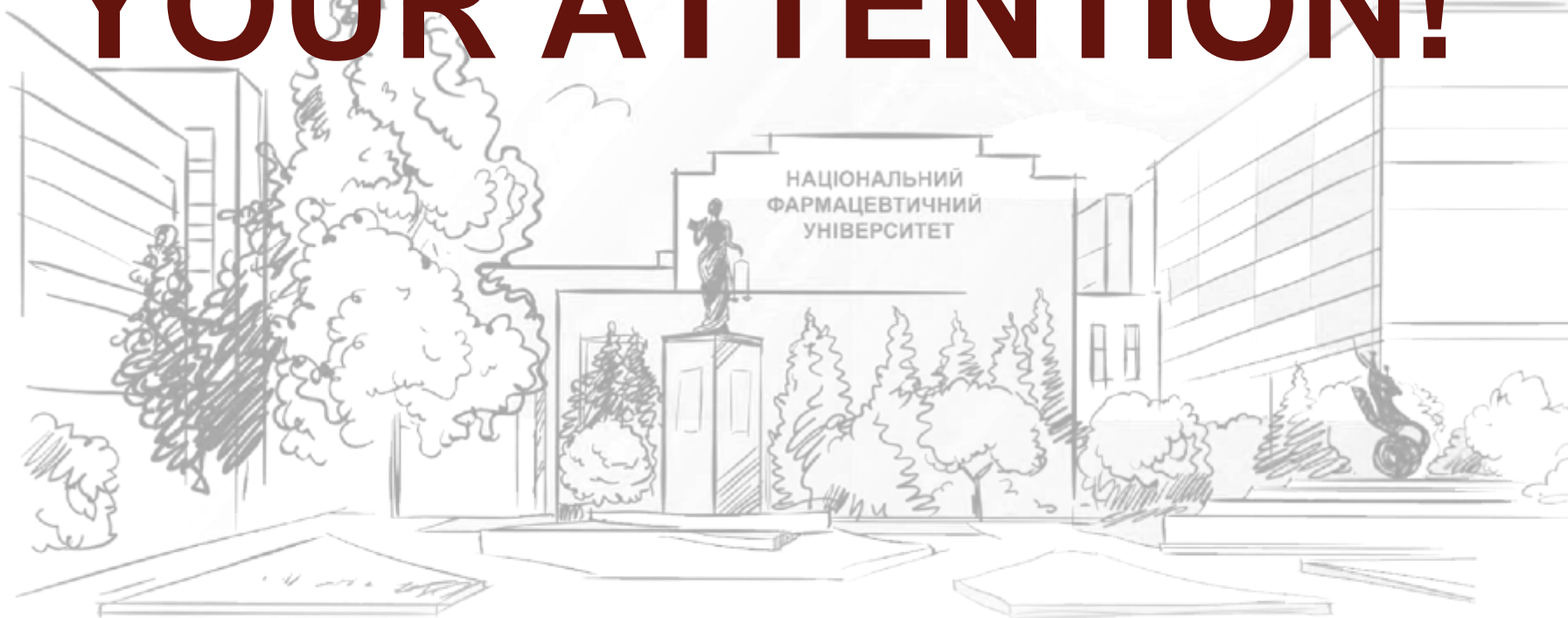
Labels: "Internal", "Store in a cool place protected from light", "Keep out of reach of children".

This homeopathic medicine is used to treat migraine and neuralgia



№ рецепта <u>1</u>		№ аптеки <u>8</u>		м. <u>Харків</u>		Берегти від дітей	Зберігати в прохолодному, захищеному від світла місці
ВНУТРІШНЄ							
Дата 01.09.21.		Гомеопатичний лікарський засіб					
Підпис		Gran. Thuja C12 10,0 Приймати по <u>8</u> гранул 3 рази на день					

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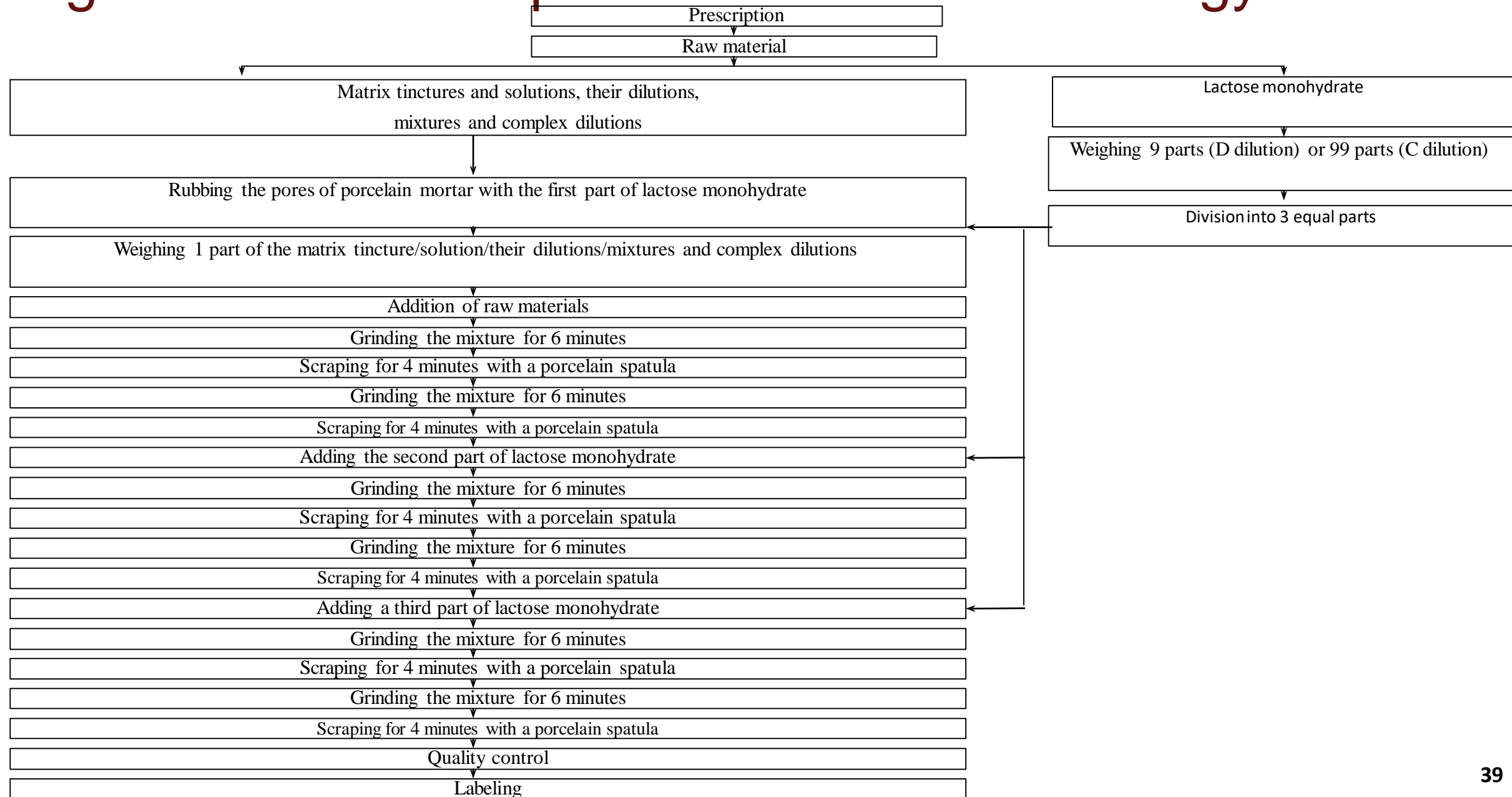
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<https://nuph.edu.ua>

TRITURATION HOMEOPATHIC

a solid dosage form consisting of several components and characterized by fluidity. Milk sugar (*Saccharum lactis*), talc (*Talcum*), lactose (*Lactosum*) are used as a filler in homeopathic triturations. The technology of homeopathic trituration consists in the maximum grinding of the components of substances, mixing with auxiliary substances in appropriate proportions (1:10 or 1:100), dosing and packaging.



Algorithm of homeopathic trituration technology



**Stamp of the medical and preventive institution.
Date, full name, age of the patient.
Full name of the doctor**

Doctor's signature

Doctor's personal seal

Trituratio Borax C3 10,0

D. S. In the morning 30 minutes before meals

Characteristics of the medicinal product.

Homeopathic trituration, which includes raw materials of mineral origin, sodium tetraborate (borax).

Technology

WCP (reverse side)

Dilution of Borax C2: 0.1 g (3 drops)

Milk sugar: 9.9 g

Technology. To make 10.0 homeopathic trituration Borax C3, weigh 9.9 milk sugar and divide into three equal parts. The pores of the mortar are rubbed with the first part of milk sugar, 0.1 (3 drops) of Dil. Borax C2 are weighed, added to the mortar, rubbed for 6 minutes, scraped for 4 minutes, rubbed again for 6 minutes, scraped for 4 minutes. Then add the second portion of milk sugar to the mortar and grind again twice for 6 minutes and scrape for 4 minutes. Next, a third portion of milk sugar is added to the mixture and the grinding and scraping operations are repeated twice for 6 and 4 minutes, respectively. In general, preparation of trituration takes at least 1 hour. After that, the finished homeopathic trituration is transferred to the vial for dispensing. Paste the prescription number. Fill in the WCP (front side).

WCP (front side)

Date N. of prescription

Dil. Borax C2 gtts. III (0,1)
Saccharum lacticum 9,9

m = 10,0

Prepared by(signature)

Checked by (signature)

Dispensed by (signature)



Labeling

Labels: "Internal", "Store in a cool place protected from light", "Keep out of reach of children".

This homeopathic preparation is used for the treatment and prevention of aphthous stomatitis



№ рецепта <u>1</u>	аптеки <u>8</u>	м. <u>Харків</u>	Зберігати в прохолодному, захищеному від світла місці	
№	ВНУТРІШНЄ			Берегти від дітей
Дата 01.09.21	Гомеопатичний лікарський засіб			
Підпис	Trit. Borax C2 10,0 Приймати <u>на кінчикукавової ложки</u> <u>вранці за 30 хв до їжі</u> Зберігати: 30 діб при $t \leq 25^{\circ}\text{C}$			

HOMEOPATHIC TABLETS

solid medicinal products obtained with the use of sucrose, lactose or other appropriate excipients according to the article "Tablets". They can be obtained by pressing one or more solid active substances with excipients or impregnation of preformed tablets by diluting homeopathic base preparations. They are prescribed for oral or sublingual use.



QUALITY CONTROL OF HOMEOPATHIC MEDICINES

A set of legislative norms and rules that ensure at the state level the effectiveness and safety of medicinal products obtained by homeopathic technology from substances used in homeopathy. For the manufacturer to be able to guarantee the quality of the products produced, he must organize a control system from a whole set of measures, namely :

- ☐ control of compliance of the original products with their specifications;
- ☐ control over the conditions of preservation and storage of raw products;
- ☐ supervision of the quality of production procedures, in particular: production and storage of granules, groats, etc.; production and storage of purified water; storage of alcohol and alcohol-water solutions; preparation of matrix tinctures; preparation of dilutions; saturation of granules or other carriers;
- ☐ supervision of the condition of work areas and equipment;
- ☐ sanitary and hygienic control.

QUALITY CONTROL OF HOMEOPATHIC MEDICINES

Putting into practice all the listed organizational points will allow you to get a safe homeopathic medicine. However, the quality of the homeopathic medicine and its clinical effectiveness mainly depend on such points :

- ❑ the original substance corresponds to the inscription on the label;
- ❑ potentiation and dynamization were carried out correctly both quantitatively (number of shakings) and qualitatively (observance of shaking technology). In other words, it is necessary to determine whether the drug is calibrated or not. Does the potency indicated on the label correspond to the actual potency of the drug.

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