

Chapter 2: powder, granulés and comprimés

Substance pulverized by pharmaceutical use

The substance that is used as a pharmaceutical substance is of the same type as a sous-vide form of fine parts, used so as an active principle (the substance that agitates on the body), so as excipient (ingredient to donner for the medical form). So, don't the granulometrie be different, enter the composition of solid forms like the compacts or the granulés, and may be included in the liquid forms of the former suspensions.

Characteristics principals

Poids and tails of the parts: He s'agit of the parts of the most petite taille, souvent infections of 100 microns.

- Fluidité: The water can be heated as a liquid, which makes it easier to transport.
- Compressibilité: It could be compact for former contracts.
- Specific surface: Large contact surface due to the influence of son volume on activation.
- Porosité: The space inside the parts can contain the air or gas.

Rôle in the medicines

- Principe actif ;The active substance is the medical component of the therapeutic effect.
- Excipient: The excipients from the inactive substances that contain more roots, those that:
- Diluents: To increase the volume of the preparation.
- Liants: For agglomerer les parts.
- Designs: To facilitate the compact design.
- Cooling agents: For better fluidity.

-Exemples d'utilisation

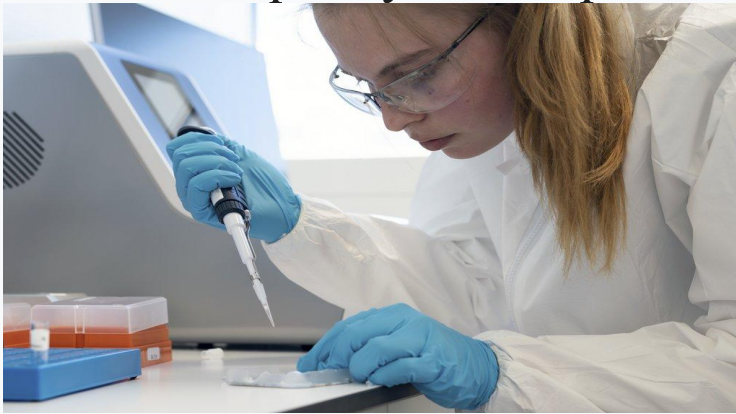
- Comprimés: The price is compressed to the former comprimés, which are available.
- Suspensions: The capsules may be dispersed into a liquid to create a fluffy suspension, like flucytosine, which is an antibiotic.

1- The powder form:

Preparation of principles and activities



control the quality of components



Allow final ingredients to control products



Conditionnement final



The medication is a medical device used for joints, joints, and necks, for oral administration, external or parenteral. It offers a stable and flexible dosage that may be difficult for the administrator and suitable for use. The types of courants include the powders for suction, the unidoses and the powders for inhalation.

For oral administration (in adult use).

-Poudres in individual sachets: The active principle and the excipients are placed in a sachet.

Use the content in a water bottle to clean or wash it after ingestion.

- Advantages: higher dosage, more stable, more easily transported and stored in liquid forms.
- Inconvenients: It may be difficult to find or disable it.

-Poudres à reconstituer: Bring in the flakes, use the necessary solution (eau, for example) for the patient or the pharmacist for use.

oAdvantages: better conservation of effective principles at this time.

o Inconveniences: Necessary a home preparation, the dosage may not be effective if it is not real.

For additional administration

-Poudres à upoudrer: Apply directly to the skin intact.

- Advantages: simple to use, absorbs humidification.
- Inconveniences: limited adhesion, drying risk on vegetables, may be difficult to operate.

— Poudres for inhalation: Destinées à être halées for a local effect in the respiratory system.

- Avantages: rapide action on les bronches.
- Inconvenients: It is necessary to dispose of specific injections, risk of inhalation infection or severe gestion.

for used pediatric

-Suspensions available: Add sous vide water to the parent's water.

- Avantages: Permet un adjustment facile de la posologie.

- Inconvenients: cannot be resolved.

2- Granulés Pharmaceuticals

The previous granulos were filled with more granules than the original parts.

Evaluation of the function of the substance used in pharmaceutical use based on its physical properties and mechanics, which tell the fluid, the compressive content, the density and the granulum, to ensure that it adapts to the fabric process (command) The replacement of capsules or the compression and compression) and the efficiency of the product. The subject is affected by the fact that the powder (active principle + excipients) can be transformed into a stable and effective galvanized form, to the extent that the pharmaceutical quality standards are respected.

Proprietaries click to value

Distribution granulometric: The proportion of parts of different tails that influence the density and fluidity of the powder.

- Fluidity: The capacitance of the poudre at the uniform manière cover, essential for the remplissage précis of the production machines.
- Compressibilité: The capacité of the parts in the agglutiner and formerly a stable cohésion after compression, tout the vitality of the adhérence auxils.
- Density :The volume of the volume, which should be optimized to facilitate manipulation and replication.

Methods for evaluation and exits

- Tests of caractération of poudres: In laboratories, use the special equipments, to ensure the appropriate physical and mechanical equipment.
- Excipients and formulation: The additional adjustments are used using an active principle to modify the texture, improve the fluidity and favor the compression.

- Granulation

This type of treatment is used to transform large granule powders, this is a crucial piece for the production of active principles that cannot be directly completed.

- Control quality

These physical, chemical, and microbiological tests have an effect in order to ensure the conformity and quality of the original material and the entire product.

Objectif final

The analysis of these evaluations allows you to ensure that the powder can be transformed into a compact or a stable pharmaceutical form, effective and safe for the patient, in order to optimize the fabrication process throughout the production chain.



granulation dry



Granulation wet

1. Granulation wet:

- Mechanical: On a liquid (solvent of water with a liquid) in a bucket to create the “liquid pots” into the parts, as well as the aggrégats.

- Proceed:

1. Preparation of the liquid: To prepare the liquid solution.

2. Mélange and granulation: The solution is found in a granulator with a high vise for previous years.

3. Séchage: The granulé humides when placed in the air, dry in a light fluid, and use a humidifier control (environment)

4. Brokerage and calibration: The granules are used to break the large agglomerates and tampers to remove the lower part of the grain.

- Advantage:

Current method and effect, particulièrement adapted auxiliaries that can not be compressed directly.

2. Granulation dry:

- Mechanical:

It may compress hardened plaques or solid blocks without liquid.

- Procédé:

1. Melange: The active principles and excipients of the melange are at this time.

2. Compact: The mixture is compressed into the ring of former large plaques (limaces).

3. Browse: The liquids are bred to remove granulos from the summer cottage.

4. Taming and final grinding: The granules are raw, and extra granulaires (combined with lubrication) are produced and grinding after the final compression.

- Avantages:

Procédé most simple, useful for sensitive products to the humidifier or to the chaleur, car il used with liquid.

3. Control tape

- Quality control:

To ensure the dryness and the granulite integrity, the quality tests have a regular effect.

Refroidissement:

The granules may be refreshed after a session to reduce the temperature of the surrounding areas.

- Finalisation:

The granulés are intended for use in the fabrication process, such as compression and compression.

Conclusion:

How do I choose this or my home?

- Choose powders

If you have a facile preparation of the liquid in a liquid and you will be able to use it or use it in a sachet.

- Choose granulés

If you have a more effective dose in a bottle, you will also have a medical library lente, or if you have a pediatrician and want to avoid the risks associated with tablets or capsules.