

Practice 23.7.

Aspirin - Vitamin C Effervescent Tablet

Acetylsalicylic acid	400 g
Ascorbic acid	250 g
Ludipress LCE *	600 g
Citric acid (crystal)	300 g
Sodium bicarbonate	600 g
Polyethylene glycol 4000	90 g

The formula is for 1000 tablets.

* Ludipress LCE contains lactose monohydrate and Kollidon 30.

Preparation:

All components are sieved through a 0.8 mm mesh diameter sieve. The cube is stirred for 15 minutes. The powder mixture is placed in the feeder of the tablet machine with the shovel and the lower and upper punches are adjusted to be compressing at the calculated weight and sufficient hardness. Start the production. Prepared tablets are placed in the container and appropriately labeled and delivered.

Questions

1. Calculate the weight of a tablet and the amount of active ingredients it contains.
2. Interpret the benefit of a substance such as Ludipress in this formula in terms of pharmaceutical technology. As an alternative to this example, what other substances do you recommend? Write.
3. Write down the purpose for which the substances in the formula are used.
4. What are the points to consider in terms of formulation components, compacting and environmental conditions in the production of effervescent tablets? Write.
5. Check the hardness, weight and dispersion of the tablets you have prepared and calculate the mean, standard deviation and relative deviation values of the results.

23.3. Controls on Tablets

- Controls of starting materials (identification, purity, potency, quantification, particle size distribution and shape of solids, moisture determination etc.),
- In-process and intermediate products (powders or granules, see p. 179) controls,
- Finished product controls applied.

The finished product controls on tablets are as follows:

1. General Appearance(color, shape, size),
2. Thickness,
3. Determination of moisture content,
4. Content uniformity (EP5),
5. Mass uniformity (EP5),
6. Hardness (EP5)
7. Friability(EP5)
8. Disintegration Test(EP5)
9. Dissolution Test(EP5)
10. Microbial quality control(EP5)