Protocol of analysis of medicinal raw materials

Date _____

Medicinal raw material Eng/Lat
_____
Medicinal plant Eng/Lat_____
Family Eng/Lat_____

Results of qualitative reactions[i]:
_____
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Determination of moisture:

Regulatory moisture content:
Calculations:

Quantification of ascorbic acid:
Standartization of raw materials by normative documentation:
Calculations**:**

Conclusion:_____
_____

Method of ascorbic acid determination

Quantitative determination of ascorbic acid is determined by titrimetric method according to the method of GF XIV edition. A sample of 20 g of crushed raw materials (exact weight) was placed in a porcelain mortar, where rubbed with glass powder (about 5 g), gradually adding 300 ml of water and insist 10 minutes. The mixture was stirred well and the extraction was filtered. In a 100 ml conical flask 1 ml of the obtained filtrate, 1 ml of hydrochloric acid 2% solution, 13 ml of water were added, stirred and titrated with 0.001 mol/L sodium 2,6 -dichlorophenolindophenolate solution from a microtiter until a steady pink colour appeared, remaining for 30-60 seconds. The titration is continued for max. 2 min.

Ascorbic acid content in terms of absolutely dry raw materials in percentage (X) is calculated by the formula:

$$x = \frac{V \times 0.000088 \times 300 \times 100 \times 100}{\mathrm{m} \times 1 \times (100 - \mathrm{W})}$$

where 0,000088 is the amount of ascorbic acid corresponding to 1 ml of sodium 2,6-dichlorophenolindophenolate solution (0,001 mol/L) in grams;

V is the volume of sodium 2,6-dichlorophenolindophenolate solution (0,001 mol/L), taken for titration, in milliliters;

m is the mass of raw materials in grams;

W is the mass loss on drying of raw materials in percent.