

Determination of Alpha Arbutin Content

【Content Determination HPLC】 This product is, α -arbutin calculated, containing $C_{12}H_{16}O_7$ not less than 99.0%. Based on method of high performance liquid chromatography (Chinese Pharmacopoeia 2010 edition two appendix) determination;
The α -arbutin content was calculated by area normalization method.

Chromatographic conditions and applicability of the system experiments:

Octadecyl silane bonded silica as a filler, 5% methanol as the mobile phase. The flow rate was 1.0 mL / min, the detection wavelength was 280 nm, and the column temperature was 25 °C. Theoretical plate number according to α -arbutin calculated not less than 5000.

Mobile phase preparation: Take methanol 50ml, diluted with purified water to 1000mL, 0.45um filter, ultrasonic degassing 15min as the mobile phase.

Test process: Precisely weigh amount of this product 0.05g, set to 50ml volumetric flask, diluted with water to the mark, as the test solution. Precisely weigh amount of the test solution 10 μ L sample injection, record the chromatogram, according to the area normalized method calculate α -arbutin content.

Calculation formula:

α -Arbutin content calculation formula:

α -arbutin content = α -arbutin peak area / total peak area \times 100%