Hamamelis virginiana

Hamamelis

Fresh bark of *Hamamelis virginiana* L., from the roots or branches or a mixture thereof

Description

The pieces of bark from the branches are 1 to 2 mm thick, up to 30 mm wide and are ribbon-like or arched. The outside is fairly smooth, grey-brown, with a whitish lustre in places. It is covered with small, transverse lenticels and areas of flaky, fissured cork tissue. The inside is light green to whitish green, with light-coloured striations, and fibrous. The pieces of root bark are of the same dimensions as the bark from the branches and are likewise arched. They are covered in places with grey, in places whitish, lustrous cork and have a smooth to slightly longitudinally striated red-brown outside and a roughened, reddish yellow inside.

Dosage forms

Production

Prepare the mother tincture and liquid dilutions according to Method 3a.

Characteristics

The mother tincture is a reddish brown liquid.

Identification

Thin-layer chromatography (2.2.27)

Test solution: the mother tincture

Reference solution: Dissolve 25 mg of arbutin *R*, 30 mg of tannic acid *R* and 30 mg of gallic acid *R* in 10 ml of methanol *R*.

Plate: TLC silica gel F_{254} plate *R* (5 to 40 µm) [or TLC-silica gel F_{254} plate *R* (2 to 10 µm)]

Mobile phase: anhydrous formic acid *R*, water *R*, ethyl acetate *R* (10:10:80 *V*/*V*/*V*)

Application: 20 µl [or 5 µl]; as bands of 20 mm [or 8 mm]

Development: over a path of 15 cm [or 6 cm]

Detection: Allow the mobile phase to evaporate, then examine the chromatograms in ultraviolet light at 254 nm and mark the quenching arbutin zone in the middle third of the chromatogram of the reference solution. Spray the plate with a 10 g/l solution of diphenylboric acid aminoethyl ester *R* in methanol *R* and then with a 50 g/l solution of macrogol 400 *R* in methanol *R*, leave for 30 min and examine in ultraviolet light at 365 nm.

Results: See below the sequence of the zones present in the chromatograms obtained with the reference solution and the test solution. Additional fluorescent zones may be present in the chromatogram obtained with the test solution.

Top of the plate	
Gallic acid: a blue fluorescent zone	A blue fluorescent zone A blue fluorescent zone
Tannic acid: a blue fluorescent zone	One to three blue fluorescent zones
Arbutin: a quenching zone (at 254 nm)	A blue fluorescent zone
Reference solution	**Test solution**

Tests

Relative density (2.2.5): 0.905 to 0.925

Dry residue (H 2.2.6): minimum 3.5 per cent

Storage

Store protected from light.