

**GIANT PUFFBALL
FOR HOMOEOPATHIC PREPARATIONS**

**BOVISTA GIGANTEA
FOR HOMOEOPATHIC PREPARATIONS**

***Calvatia gigantea* ad praeparationes homoeopathicas**

Other Latin names used in homoeopathy: **Lycoperdon bovista**
Bovista

DEFINITION

Whole reproductive system of the fresh mushroom, *Calvatia gigantea* (Batsch) Lloyd (= *Bovista gigantea* Bull.) on maturity.

IDENTIFICATION

- A. Receptacle of a great size, measuring up to 30 cm, piriform, flattened at the top. Whitish exoperidium turning yellowish or pale fuliginous, chapped in large, flattened and pyramidal aerolae; fragile endoperidium, whitish turning yellowish, fuliginous at the end, opening widely at the top on maturity. Sterile base, cellular and compact.
- B. Examine under a microscope, using *water R*: fuliginous-olive spores, small (3-5 µm), round, smooth with a short pedicel. Capillitium consisting of olive-brown, loose filaments, 4-12 µm thick.

TESTS

Foreign matter (2.8.2): maximum 5 per cent.

Loss on drying (2.2.32): minimum 60.0 per cent, determined on 5.0 g of finely-cut drug by drying in an oven at 105 °C for 2 h.

STOCK

DEFINITION

Giant puffball mother tincture is prepared with ethanol (65 per cent V/V) diluted 1/20, using the whole reproductive system of the fresh mushroom, *Calvatia gigantea* (Batsch) Lloyd (= *Bovista gigantea* Bull.) on maturity.

PRODUCTION

Method 1.1.10 (2371). Drug fragmented into segments 4-5 cm long. Maceration time: 3-5 weeks.

The General Chapters and General Monographs of the European Pharmacopoeia and Preamble of the French Pharmacopoeia apply.

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CHARACTERS

Appearance: reddish-brown liquid.

IDENTIFICATION

A. Thin-layer chromatography (2.2.27).

Test solution. Mother tincture.

Reference solution. Dissolve 10 mg of *rosmarinic acid R* and 5 mg of *chlorogenic acid R* in 40 mL of *ethanol (96 per cent) R*.

Plate: TLC silica gel plate R (5-40 µm) [or TLC silica gel plate R (2-10 µm)].

Mobile phase: water R, glacial acetic acid R, butanol R (10:10:40 V/V/V).

Application: 20 µL [or 3 µL] as bands.

Development: over a path of 10 cm [or 6 cm].

Drying: in air.

Detection: examine in ultraviolet light at 365 nm.

Results: see below the sequence of fluorescent zones present in the chromatograms obtained with the reference solution and the test solution. Furthermore other faint, fluorescent zones may be present in the chromatogram obtained with the test solution.

Top of the plate	
Rosmarinic acid: a blue zone	A blue zone A blue zone
----- Chlorogenic acid: a blue zone -----	----- -----
Reference solution	Test solution

B. Thin-layer chromatography (2.2.27).

Test solution. Mother tincture.

Reference solution. Dissolve 5 mg of *leucine R* and 50 mg of *threonine R* in 100 mL of *ethanol (96 per cent) R*.

Plate: TLC silica gel plate R (5-40 µm) [or TLC silica gel plate R (2-10 µm)].

Mobile phase: water R, glacial acetic acid R, butanol R (10:10:40 V/V/V).

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Application: 20 µL [or 3 µL] as bands.

Development: over a path of 10 cm [or 6 cm].

Drying: in air.

Detection: spray with *ninhydrin solution R*, then heat the plate at 100-105 °C for 10 min. Examine in daylight.

Results: see below the sequence of zones present in the chromatograms obtained with the reference solution and the test solution. Furthermore other faint zones may be present in the chromatogram obtained with the test solution.

Top of the plate	
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Leucine: a pink zone	Two purplish-pink zones
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Threonine: a purplish-pink zone	A purplish-pink zone Two purplish-pink zones
Reference solution	Test solution

TESTS

Ethanol (2.9.10): 60 per cent V/V to 70 per cent V/V.

Dry residue (2.8.16): minimum 0.40 per cent *m/m*.

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