

**BLACKTHORN  
FOR HOMOEOPATHIC PREPARATIONS**

**PRUNUS SPINOSA  
FOR HOMOEOPATHIC PREPARATIONS**

**Prunus spinosa ad praeparationes homoeopathicas**

DEFINITION

Fresh, young twig of *Prunus spinosa* L., harvested at the beginning of the blooming season.

CHARACTERS

Macroscopic characters described under identification.

IDENTIFICATION

Blackish-brown, young, pubescent twig, highly thorny and divaricate, bearing flowers before the leaves appear. Small, white, generally solitary flowers with 5 petals, 15 to 30 stamens and free ovary. Usually glabrous peduncles. Bell-shaped calyx with 5 lobes and glabrous inside.

TESTS

**Foreign matter** (2.8.2): maximum 5 per cent among which less than 2 per cent of twigs covered with suber.

**Loss on drying** (2.2.32): minimum 35.0 per cent, determined on 5.0 g of finely-cut drug, by drying in an oven at 105 °C for 2 h.

**STOCK**

DEFINITION

Blackthorn mother tincture complies with the requirements of the general technique for the preparation of mother tinctures (see *Homoeopathic Preparations (1038)* and French Pharmacopoeia Authority Supplement). The mother tincture is prepared with ethanol (65 per cent V/V), using fresh, young twig of *Prunus spinosa* L., harvested at the beginning of the blooming season.

*Content*: minimum 0.15 per cent *m/m* of tannins, expressed as pyrogallol (C<sub>6</sub>H<sub>6</sub>O<sub>3</sub>; *M<sub>r</sub>* 126.1).

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

## CHARACTERS

*Appearance:* orange-brown liquid.

## IDENTIFICATION

A. Thin layer chromatography (2.2.27).

*Test solution.* Mother tincture.

*Reference solution.* Dissolve 10 mg of *rutin R* and 10 mg of *isoquercitroside R* in *methanol R* and dilute to 10 ml with the same solvent.

*Plate:* TLC silica gel plate *R*.

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

*Application:* 20 µl, as bands.

*Development:* over a path of 10 cm.

*Drying:* in air.

*Detection:* first spray with a 10 g/l solution of *diphenylboric acid aminoethyl ester R* in *methanol R* then with a 50 g/l solution of *macrogol 400 R* in *methanol R*. Allow the plate to dry in air for about 30 min. 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	
	A green zone An orange zone
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Isoquercitroside: an orange zone	A green zone A blue zone
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Rutin: an orange zone	An orange zone (rutin)
<b>Reference solution</b>	<b>Test solution</b>

## TESTS

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

**Dry residue** (2.8.16): minimum 1.0 per cent *m/m*.

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**ASSAY**

Carry out the determination of tannins in vegetal drugs (2.8.14). Use 5.000 g of mother tincture.

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