



Edition: BP 2025 (Ph. Eur. 11.6 update)

Methylcellulose Tablets

[General Notices](#)

DEFINITION

Methylcellulose Tablets contain Methylcellulose 450 in a suitable flavoured basis.

The tablets comply with the requirements stated under Tablets and with the following requirements.

IDENTIFICATION

- A. Whilst stirring, introduce a quantity of the powdered tablets containing 1.0 g of Methylcellulose 450 into 50 mL of [carbon dioxide-free water](#) heated at 90°. Allow to cool, dilute to 100 mL with the same solvent and continue stirring until solution is complete (solution A). Heat 10 mL of solution A in a water bath, with stirring. At temperatures above 50° either the solution becomes cloudy or a flocculent precipitate is produced. The solution becomes clear on cooling.
- B. Mix thoroughly a quantity of the powdered tablets containing 1 g of Methylcellulose 450 with 2 g of finely powdered *manganese(II) sulfate* in a test-tube about 16 cm long. Impregnate a strip of filter paper with a freshly prepared mixture of 1 volume of a 20% v/v solution of [diethanolamine](#) and 11 volumes of a 5% w/v solution of [sodium nitroprusside](#) adjusted to pH 9.8 with 1M [hydrochloric acid](#). Insert the strip to a depth of 2 cm into the upper part of the tube, immerse the tube to a depth of 8 cm in a silicone oil bath and heat at 190° to 200°. The filter paper does not become blue within 10 minutes. Carry out a blank test.

TESTS

[Kinematic viscosity](#)

For tablets containing 500 mg of Methylcellulose 450, at 20°, 350 to 550 mm² s⁻¹, when determined by the following method. Place 2.6 g of the powdered tablets in a wide-mouthed bottle, add 100 mL of [water](#) heated to 85° to 90°, close the bottle with a stopper fitted with a stirrer and stir for 10 minutes. Cool in ice and continue stirring until the solution is of uniform consistence. Remove the ice and allow the solution to attain room temperature. Determine the [kinematic viscosity](#) of the solution, [Appendix V H](#), Method II, using a suspended-level viscometer (size 3).

[Disintegration](#)

The requirement for Disintegration does not apply to Methylcellulose Tablets.

LABELLING

The label states that the tablets should be broken in the mouth before swallowing.

